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Models of Partnership Working: an Exploration of English NHS and University Research Support Offices

Mary Judith Perkins

A Thesis submitted for the degree of Professional Doctorate in Health

University of Bath

Department for Health

September 2011

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Mary Perkins

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For Andy, Adam and Anna.

Abstract

Clinical and applied health research is led by academics and often conducted in the National Health Service (NHS). Researchers work with Research Support Offices in both Universities and the NHS. The 2006 government health research strategy, *Best Research for Best Health* heralded dramatic changes for both the funding of, and support for, clinical and applied health research in England with the creation of new, quality driven, competitive funding streams and a new infrastructure to support research and researchers. One of the results of these changes was to drive NHS and University Research Support Offices closer together, with some institutions forming close partnerships, including joint offices to deliver support for clinical and applied health research.

Little is known about the models of partnership working between the universities and the NHS and the factors that drove the decisions to create partnership Research Support Offices. Therefore it is important to map current arrangements and describe the factors that contribute to those arrangements. Firstly a survey of University Research Support Offices based in universities with a medical school was undertaken to provide a snapshot of the structures and functions of those Research Support Offices. Then semi-structured interviews were undertaken with a sample of staff working in joint NHS/University and separate NHS and University Research Support Offices to gain a deeper understanding of why the Research Support Offices were structured and functioned in the ways that they did.

The main findings from this work were: there are no common structures, functions, or systems and few common processes in place to support clinical and applied health researchers across England; advice and help for navigating the complex regulatory environment currently underpinning clinical and applied health research in England is fragmented; three models of working between NHS and university Research Support Offices were identified; joint offices, collaborative offices and separate offices.

The drivers for joint working between NHS and University Research Support Offices are compelling. However, the barriers to working closely can be immense if not carefully considered. Those contemplating working in partnership need to ensure that they understand what the partnership aims to deliver and all partners need to commit to a shared vision. In addition, practical issues such as the systems to be used, the physical location of staff and employment issues need to be addressed in advance before meaningful joint working can occur.

Abbreviations

AHSC	Academic Health Science Centre/Cluster
ARCO	Attributing revenue costs of externally funded non-commercial research in the NHS (ARCO)
ARMA	Association of Research Managers and Administrators
BRfBH	Best Research for Best Health (DH 2006)
CEO	Chief Executive Officer
CSR	Comprehensive Spending Review
DH	Department of Health
EU	European Union
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institute
IMP	Investigational Medicinal Product (drug)
MHRA	Medicines and Healthcare products Regulatory Agency
NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
NIHR	National Institute for Health Research
OSCHR	Office for Strategic Coordination of Health Research
PVC	Pro-Vice Chancellor
R&D	Research & Development
RAE	Research Assessment Exercise
REF	Research Excellence Framework
RM&A	Research Management and Administration
RSO('s)	Research Support Office(s)
S.I.	Statutory Instrument
SLA	Service Level Agreement
SSCI	Social Sciences Citation Index
THE(S)	Times Higher Education (Supplement)
UKCRC	United Kingdom Clinical Research Collaboration
UKCRN	United Kingdom Clinical Research Network
VC	Vice-Chancellor
WTE	Whole Time Equivalent

Glossary of Terms

Best Research for Best Health New Labour Government Health Research Strategy, released in January 2006 together with implementation plans.

Clinical Academic Clinically qualified (typically doctors or dentists) holding an academic post with a university and a clinical post within a health care provider.

Phases of Clinical Trials (AMS 2011)

Phase 1 studies are carried out to determine how the body metabolises and responds to a drug and how it will tolerate increasing doses. These usually involve small numbers of healthy volunteers – except for where the treatment is particularly toxic – for example chemotherapy drugs for cancer, where the treatment will be given to the target population.

Phase 2 studies involve small groups of patients to test whether the drug works for the disease for which it has been developed and to determine the most appropriate dose.

Phase 3 studies involve giving the drug to larger numbers of people with the target condition (1,000 – 5,000) to determine safety and efficacy. Although the participants recruited will be carefully screened before they take part, they begin to resemble the target population more closely and they may also have some carefully monitored co-morbidities. The results from the first three phases of results plus the pre-clinical animal data will form the package of information given to the regulatory authorities when applying for a license to market the product.

Phase 4 studies are performed after marketing the new product. These are commonly thought of as post-marketing surveillance trials. This is the first time the product is prescribed to thousands of people with the target condition and it is at this stage that the full picture of side-effects becomes apparent.

Research Sponsor The individual, organisation or group taking on responsibility for securing the arrangements to initiate, manage and finance the study.

Chapter One:

1.1 Introduction

The purpose of this thesis is to map, describe and explore models of partnership working between National Health Service (NHS) and University Research Support Offices. To this end, a survey of Directors of University Research Support Offices and interviews with Research Support Office staff in both the Higher Education Sector and the National Health Service were conducted.

The publication in 2006 of the New Labour Government's Research Strategy, *Best Research for Best Health* (Department of Health 2006), heralded a dramatic change for the funding and focus of health research in England. For the first time, NHS organisations were expected to compete, based on quality, at a regional and national level for research funding for applied clinical research, money that had previously been allocated as a lump sum according to self-declared levels of activity. This move to large scale grant management was a change for most NHS institutions and NHS Research Support Offices had to either increase their skill-set to manage these changes, ignore the changes, or work in partnership to access those skills from others – most notably the Higher Education sector. That led to the interest in exploring the issues within this thesis – what is known about models of partnership working between the NHS and University sectors with regard to the provision of research support? Of those who work in partnership, what is known about the structure of the partnership and the reasons for choosing that structure? How effective do the people working within those structures think they are?

The opportunity to explore these questions within the structured environment of a new professional doctorate programme gave access to both academic expertise and practice-based expertise to guide and refine this area of exploration. After completing a literature review, it was decided to concentrate on the partnerships between the NHS and the

University sector for the provision of research support for translational and applied health research. The search for literature did not find any work describing types of partnerships between University and NHS Research Support Offices. Therefore it was decided to undertake a mapping exercise to identify the types of partnerships in existence and then explore relevant aspect of these partnerships in more detail.

This chapter contains the following sections: Section 1.2 describes research management and administration (RM&A) and gives a brief history of how this profession has developed in Universities and within the NHS. Section 1.3 describes the policy and political context of partnership working between the NHS and Higher Education Institutions (HEIs). Section 1.4 describes the format of the rest of the thesis.

1.2 Research Management and Administration

Research management and administration is a profession in development (Langley 2007) and there is no standard occupational definition of what a research administrator does. Within the higher education sector, Deem (2010) lists the functions of research management and administration as: assisting academic staff with aspects of research grant applications; work around intellectual property; research ethics; networking with funders; contracts and knowledge transfer. A similar list of responsibilities comes from Shelley (2010), who carried out an in-depth survey with 120 research management and administration staff in universities and found that the roles ranged from the provision of simple information to grant support, complex budget management, all the way up to developing institutional research strategy. Shelley found 78 different job titles in her sample of 120 and a range of salaries from lower level administrative salaries to salaries commensurate with senior academic pay.

1.2.1 Development of Research Management and Administration in Universities

The rise of research management and administration as a profession has its origins in the rise of the knowledge society and the increasing importance of research for English Universities (Kirkland 2009). As core funding to universities was reduced and external

research income became more essential, universities had an increased need to understand the range and value of the work their staff were engaged in. The advent of the research quality assessment agenda – initially through the HEFCE Research Assessment Exercise (RAE), and now the Research Excellence Framework (REF) - means that institutions have to be able to collect information in order to report on it. Over time, research management and administration has become a specialty in its own right, having emerged from general administration (Carter & Langley 2009). This description of research management and administration encompasses research strategy, policy, governance, finance, people management, postgraduate research, assessment and systems.

There is some debate as to whether research managers administer the mechanisms of research (for example approval processes and systems for budgets and contracts) or manage programmes of research as equal partners with their academic colleagues. Whitchurch (2008) argues that some research managers now occupy a ‘third space’ between academic and professional domains whereby they have considerable expertise and academic credibility as well as highly developed administrative skills.

1.2.2 Development of Research Management and Administration within the NHS

The advent of research management within the NHS has had different policy drivers. The Culyer report (Culyer 1994) centred on the need to understand the activity and cost of research in the NHS. This resulted in NHS bodies making returns to the Department of Health – known colloquially as ‘The Culyer Declaration’. This return detailed the volume and self-assessed cost of research supported by NHS organisations. This resulted in NHS organisations having that amount of their budgets ring fenced for research. Importantly, this was not new, additional money into the NHS, but rather recognition of the amount they already spent supporting research. The NHS bodies then had to make an annual declaration to the DH with the implicit threat that money not used appropriately to support research would be removed. In practice however, NHS bodies continued to receive the allocation they had originally applied for, uplifted for inflation.

Gathering data on the levels of research and costing that activity, was a new skill for the NHS and some Trusts (notably in London) sought support from their partner academic institutions to support this declaration (Robinson 1998). Many others, though, did the work in-house and one of the main impacts of the Culyer declarations was the establishment of NHS Research and Development management (Arnold *et al.* 1998), with most NHS bodies creating research management positions in response to the need to manage the Culyer declarations. NHS bodies now had to establish the systems needed to report on and cost research. Leach (1998) describes the key role of the research and development office in the NHS to be the focal point for all managerial and administrative research activity for all research issues. These issues included: processing of research grants and contracts, costing of research and institutional sign off, contract negotiation and protection of IP, implementation of research strategy and tracking and monitoring of activity – thus far, the evolution of research management in HEIs and the NHS is similar – although at least a decade apart.

1.2.3 Differences between NHS and University Research Management and Administration

The Research Governance Framework (RGF), published in 2001 (DH 2001) had a big impact on the NHS systems for managing research. The RGF placed a duty of care on all NHS bodies to know about and approve all research on their premises, with their staff, patients tissue or data. The need to now ‘approve’ the research and be assured of the ethical and scientific integrity of the research ‘within their walls’ pushed some NHS bodies to establish extremely risk averse, governance oriented systems for the management of research (DH 2006). At the same time, the EU Directive on Clinical Trials (EU 2001), incorporated into UK law in 2004 as the Statutory Instrument 1031 (S.I. 1031) Medicines for Human Use (Clinical Trials) Regulations, was placing stringent requirements on all those who hosted, sponsored or participated in trials of investigational medicinal products. Several highly publicised cases of research misconduct (the Alder Hey organ retention, the Stafford neonatal babies research) led some NHS bodies to be extremely cautious with regard to the systems they set-up to

manage and administer research. No central guidance was available to NHS bodies on how to implement the standards within the Research Governance Framework or the S.I. and inevitably, a myriad of systems grew resulting in a very complex environment within which to coordinate multi-centre research. There has been much criticism of the environment for research in the UK (for example, Howarth & Kneafsey 2005, Salman 2007) and the recent Academy of Medical Sciences review (AMS 2011) has illustrated those criticisms further. This review acknowledges that the regulation and governance pathway was established with good intentions but in an uncoordinated way and states that “...the sum effect is a fragmented process characterised by multiple layers of bureaucracy, uncertainty in the interpretation of individual legislation and guidance, a lack of trust within the system and duplication and overlap in responsibilities.” The review further states: “Together with the lack of agreed timelines within which approval decisions are made, the governance arrangements within NHS Trusts are the single greatest barrier to health research.” (AMS review 2011, p.3). This complexity is one of the streams of work within the implementation of *Best Research for Best Health* (DH 2006), with a number of national initiatives ongoing to streamline the bureaucracy now surrounding research in the NHS. The implementation plans also state an explicit aim to facilitate joint working between the NHS and academic partners (NIHR 2010 implementation plan 4.1 July 2006, updated January 2010). This, combined with “A healthcare culture that fails to fully support the values and benefits of health research “ mean that it is timely for the NHS to re-examine the approach to working with academic partners to support research.

1.2.4 Joint Working between NHS and University Research Support Offices

The idea for joint working was not new, with several initiatives proposed at the end of the 1990's (Leach 1998). Some NHS bodies, such as Great Ormond Street Hospital, formed joint research administration offices with their academic partners early in the 1990's. In that case, this was as a result of a very poor RAE return in 1992 for the Institute of Child Health and a critical report on the value of the research to the NHS by the Thompson review of the London special health authorities (quoted in Aynsley-Green

1998) which was not only critical of the low scientific standard of the work, but also of the low relevance to the NHS (Aynsley-Green 1998). An analysis of the practicalities of working jointly between the NHS and University Research Support Offices was undertaken by Robinson in 1998 who claimed that joint offices worked well for NHS bodies with one close academic partner, closely located geographically (preferably on the same site) and whose work has a close synergy. This fits well with the solution found by Great Ormond Street and the Institute of Child Health, and also the specialist mental health care trust, The South London and the Maudsley Mental Health Care Trust and the Institute of Psychiatry. However, Robinson counselled against the same arrangement when there were either several hospitals or several higher education partners. Robinson placed considerable emphasis on location with a suggestion that the most effective Research Support Offices are those most closely located to the clinical researchers.

1.3 Section Two: Policy context

This section describes the policy and political context at the time of this work. This section focuses on the political environment for partnership working created by the election of New Labour in 1997, the release of a new government strategy for health research in 2006 and the publication of a review of health research funding (Cooksey 2006a).

1.3.1 Partnerships and the NHS

In 1997 the newly elected New Labour government identified with partnership working. It became *the* political imperative compared with the previous government's emphasis on competition as the effective way to achieve desired social outcomes (Glendinning *et al.* 2005a). Partnership working was not a new concept, but the scale of the partnerships stimulated and encouraged by New Labour was unprecedented. For example, Sullivan and Skelcher (2002) identified 5500 local or regional partnerships initiated or created by the government. Analysing government data, the same authors also identified 60 different types of public policy partnerships. Jupp (2000) claimed that the word

partnership was used in parliament 6,197 times in 1999, compared with just 38 times a decade earlier.

The New Labour government championed partnership working as necessary to revolutionise an increasingly decaying National Health Service. In 1997, writing the foreword to *The New NHS: modern, dependable* (DH, 1997), Alan Milburn, the Secretary of State for Health, wrote “there will be no return to the old centralized command and control systems of the 1970s, but nor will there be a return to the divisive internal market system of the 1990’s. ... instead there will be a third way of running the NHS – a system based on partnership and driven by performance.” In the foreword to *Partnership in Action* (DH 1998), Milburn wrote about needs spanning more than one section (e.g. health and social care) becoming lost in “sterile arguments about boundaries”. The document went on to state that the needs of the organisations were being prioritised over the needs of the very people those organisations were there to serve. Government papers on partnerships explicitly recognised that barriers to partnership working needed to be removed, incentives provided and progress towards objectives monitored (DH 1998).

In 1999, the NHS Act placed a statutory duty of partnership on the NHS and Local Authorities to work on health improvement issues. In 2000, the NHS Plan defined financial incentives to encourage and reward joint working between Primary Care Groups (now Trusts), Secondary and Tertiary NHS Trusts and social services. In addition, legal barriers to pooled budgets were removed. Thus, the framework for partnership working was set. With regard to clinical research, the government commissioned several reports about the impact of clinical research and the steps needed to support it. The Academy of Medical Sciences produced a report called *Strengthening Clinical Research* (AMS 2003), which highlighted the concerns that a substantial gulf existed between basic science discoveries and the translation of those discoveries into benefits for patients. The *Biosciences Review 2015: Improving National Health; Improving National Wealth* (BIGT 2003) recognised the opportunity to transform the efficiency and effectiveness of clinical trials in the UK through effective partnership

working with the NHS. The most significant contribution the NHS can make to R&D lies within the applied domain – such as clinical trials, clinical effectiveness, service delivery research and public health. This was described in a Department of Health (DH) report on Research for Patient Benefit (DH 2004). The interdependence of the NHS and academia is well established. The NHS funds clinical academics and other academic staff (Medical Schools Council 2008). The clinical academics provide NHS service delivery alongside NHS colleagues and NHS staff provides teaching for students alongside their academic colleagues. The provision of a research intensive NHS will therefore have to be a partnership with academia.

1.3.2 *Best Research for Best Health.*

The importance of the biomedical and health research agenda's for the UK was demonstrated by the release of a new strategy for health research *Best Research for Best Health* (DH 2006). This strategy recognised that research provides the evidence for better health care and drives quality. The UK was known to have a leading international position in health research, but this was under threat. Several reports, for example Biosciences 2015 cited above and the Pharmaceutical Industry Competitive Task Force Report (PICTF 2001) had highlighted the risks to the UK of losing its leading edge in clinical and applied health sciences. The threat was not only academic but economic as the pharmaceutical industry is extremely important to the health of the UK economy with the net benefits prospectively estimated in 2001 to be anything between £0.7 billion to £2.0 billion (PICTF 2000).

The Department of Health launched *Best Research for Best Health* in January 2006 following widespread consultation with stakeholders (DH 2005). This government strategy proposed radical changes for the funding and organisation of clinical research in the NHS and associated medical schools in the UK. The strategy's goals included making the NHS an internationally recognised centre of excellence for research, developing the clinical research workforce and prioritising patient-focused applied research. The strategy had 16 accompanying implementation plans which detailed, amongst other

things, the centralisation of funding, the creation of a National Institute for Health Research (NIHR) and the development of a new clinical research network for England.

The consultation, prior to the launch of the strategy, identified many barriers to clinical research in the UK including:

- The historical allocation of NHS Research & Development (R&D) funding
- NHS Trust Management as a bureaucratic block to research
- Few effective incentives for research in the NHS
- Dramatic fall in the number of clinical academics
- Perception that NHS funding is second class
- Perception that applied research is second class
- Low applied evidence base

Funding has been centralised by the incremental removal of the Research and Development Funds which historically sat within 253 Trusts (awarded as a result of their original and subsequent Culyer declarations). This funding is now available through various different competitive funding streams. The NIHR provides the mechanism to deliver *Best Research for Best Health*. The NIHR directs and oversees all NHS research in England. There is no indication from the new coalition government that the focus on, or the investment in health research is changing with the NIHR research budget protected in the October 2010 Comprehensive Spending Review.

One aim of *Best Research for Best Health* was to reduce the burden of complicated regulatory systems for researchers through 'busting bureaucracy' by streamlining the systems for managing and governing research. Pertinent to this review is that one of the crucial requirements of the new funding rounds is that the NHS and academia must now work in partnership to access the new funding streams with the finance and contracts awarded to the NHS partner. In addition, one of the largest of the new awards, the Applied Programmes Rounds, requires a senior NHS manager to be one of the co-applicants on the grants. This NHS manager should be in a position to champion and implement the findings of the research when appropriate.

1.3.3 The Cooksey Review

The Cooksey Review of Health Research Funding (Cooksey 2006b) provides a history of NHS research funding and details the reasons why the systems should change. From the days of the initial Haldane Report (Haldane 1918, in Cooksey 2006b) into the machinery of government, through the Rothschild report (Rothschild 1971, in Cooksey 2006b) and the Culyer Report (Culyer 1994), the government, and in particular, the Department of Health, has struggled to influence the research agenda and gain a high profile for applied research.

Cooksey explicitly recognises the requirement for partnership working. The aim of the review was to put forward mechanisms by which the funding arrangements for health research in the UK should be structured in order to obtain “maximum benefit for research whilst eliminating duplication of effort”. The main recommendation is for one funding stream divided between the Medical Research Council and the new National Institute for Health Research. Cooksey recognises the need for cohesion amongst these powerful partners within health research with the acknowledgement that this maximum benefit and reduction in duplication can only be achieved “...if all those involved are dedicated to ensuring that they work together cohesively in the research continuum” (Cooksey, 2006a executive summary).

The Cooksey review recommended that much more emphasis should be placed on ‘translational research’ – i.e. taking basic science findings and working them up to provide benefit to patients. In order for translational research to happen, Cooksey explicitly recommends partnership working between the agencies delivering health research in the NHS and suggests that communication and leadership are key factors influencing success. Strong leaders are required to facilitate and encourage clinicians, lab-based researchers and researchers from other key disciplines to discuss their work research and needs. This in turn develops a culture of trust, mutual understanding and cooperation.

Cooksey recommended the establishment of an Office for Strategic Coordination of Health Care Research (OSCHR). This has been established and the office reports jointly to the Secretaries of State for Health and Business Innovation and Skills. The office has two main functions: First to set the health research strategy for the UK (in conjunction with the devolved nations) and second to decide on the division of money between the Medical Research Council and the National Institute for Health Research. In addition, the OSCHR also has a remit to monitor the performance of partners in delivering the research strategy and will also encourage and develop research partnerships. The Cooksey report stopped short of merging the MRC and the NIHR but has strongly recommended seamless delivery of the national health research strategy.

1.3.4 The wider policy context

At the time of data collection, the 2010 Comprehensive Spending Review (CSR) had not yet occurred. However, given the widely held view that the UK was in economic recession, it was considered likely the new Conservative/Liberal Democratic coalition Government would significantly prune budgets for the UK science and research base, to Research Councils, Government Departments and NHS R&D, all of which impact directly on HEIs and NHS Trusts. In addition, major changes to the way universities were funded for teaching and research were anticipated.

The CSR was thought to be going to reduce the science budget by up to 30%. In the end, the real term reduction was 9% over the course of the CSR period. The NIHR element of the budget was protected. In addition, capital expenditure budgets were cut by 50%. The introduction of student fees has led to concerns that students will become more demanding of the services they will pay to receive from universities, and the predominant agenda will become delivering against the student experience. The risk to universities is that the value of research led teaching is not fully recognised and there may be a de-prioritisation of investment into research as a result. In parallel, the external funding climate has changed massively and there is now greater focus on concentration, partnership, impact and pace of delivery and we are beginning to observe

a change of behaviours whereby funders have begun to actively shape research as sponsors, rather than as passive funders.

1.4 Format of the thesis

This thesis is presented in six chapters that describe the process and progress of the study.

Chapter two describes a review of the current literature in the areas of partnership working and relevant policy literature.

Chapter three describes the mixed methods approach to the collection and analysis of the data for this thesis. Firstly the methods behind the development, administration and analysis of an on-line self-completed survey of Directors of HEI Research Support Offices are described. This was a short survey designed to provide descriptive data on the current models of research support and relationships between the HEI Research Support Offices and the NHS Research Support Offices. Secondly, the methods of data collection, management and analysis of fifteen semi-structured interviews are described. The approach to the data management and analysis followed the *framework thematic analysis* method (Ritchie *et al.* 2003).

Chapter four describes the results of the survey undertaken with all Research Support Offices for HEIs with a medical school in England (n = 23). This survey maps the existing models of research support partnerships between the HEIs and the NHS based on the audit commission's descriptions of types of partnerships. The survey had a response rate of 100% and demonstrated a multitude of models of partnership working between HEI Research Support offices and NHS Research Support Offices.

Chapter Five describes the findings from the fifteen semi-structured interviews carried out with participants representing both NHS and HEI Research Support Offices at different levels of seniority; executive officers of both the NHS and HEIs and manager-academics. Where appropriate, quotations are included to support the analysis. Within this chapter, an understanding of the provision of research support from the point of

view of the participants is sought. This point of view is located within the structures and frameworks within which the participants work.

In chapter six the results and findings of the work in relation to the known literature in the area are discussed. New insights and findings from the analysis are presented. This chapter also presents a summary of the thesis and discusses the limitations of the work. A reflexive summary of the work is also presented in this chapter. Finally, recommendations for future research are made.

Chapter Two. Literature Review.

2.1 Introduction

The aim of this literature review is to examine the existing research literature in the area of partnership working and apply that literature to the field of NHS Trust and University Research Support Office joint working for the benefit of health researchers. An earlier, shorter version of this literature was published in the *Journal of Research Administration* and is bound in as appendix 2.1

Described within this review are: models and definitions of partnerships; why these models and definitions may be limited; what the predictors of success and failure are between partners; and what these models and definitions can predict for joint working between the NHS and HEIs. The aim was to perform a comprehensive, not systematic review of the literature. In professional terms, the area of interest is the partnership working created for Universities and National Health Service (NHS) Trusts by the new arrangements for funding applied health research in *Best Research for Best Health* (BRfBH) (Department of Health 2006). This funding, is, on the whole, applied for by clinical academics (i.e. clinically qualified professionals employed by the higher education sector), but has to be managed through the associated NHS Trusts. This has forced greater coordination and collaborations between the Higher Education Institutions (HEIs) and the NHS Trusts. In practice-related terms, these new awards require NHS research management and University research management to develop new processes and policies to manage both the funding, contracts and projects. From an academic perspective, there is an increasing focus on theoretical and methodological issues to do with researching the concepts and implementation of partnerships. This interest has grown, particularly in the social science disciplines, as a result of the government focus on, and, in some cases the mandating of, partnership working.

Thus, the aim of this literature review is to examine what the peer reviewed and policy literature on partnership working tells us may be some of the opportunities and challenges facing NHS Trusts and University Research Support Offices supporting clinical

and applied health researchers in the light of the new policy *Best Research for Best Health*.

The review is organised into the following sections: The first section details the search strategy used to identify pertinent literature. These searches were carried out at three time points: The first before undertaking any empirical work to inform the research questions; the second search was post analysis of the data to help explain the findings and finally the search was repeated during the writing-up phase of this thesis, to ensure that the literature base was current. The second section of this review describes the current definitions, models and theories of partnerships. The third section discusses the literature around what factors predict success of partnerships, what factors might lead to the failure of partnerships and what approaches to the evaluation of partnerships might be useful. The final section summarises the findings of this review.

2.2 Search strategy

The strategy to searching for the literature needed for this review was an inclusive and iterative approach. Online searches were combined with attempts to find unpublished literature by attending professional conferences and discussing the area with an acknowledged expert in the field (Bowling 1997). In addition, the grey literature database OpenSigle (<http://opensigle.inist.fr/>) was searched for theses and unpublished manuscripts. This process of searching continued throughout writing this review until new literature did not raise new issues or concepts.

The databases Pubmed and the Social Sciences Citation Index (SSCI) were searched using the search terms “NHS partnership*”, “NHS partnership*evaluation”, “model partnership*”, “theory partnership*” plus those terms combined with synonyms for partnership such as collaboration, joined-up-working, integrated services, coordination, seamless services, alliance* and cooperation. The search was restricted to English language and the years restricted to 1997 onwards (election of New Labour and explosion of interest in partnerships).

When appropriate articles were found in the databases, the 'find related records' function within SSCI was used to source original data. The publications section on the website of the Nuffield Institute for Health, based at the University of Leeds also proved a rich source of documents. The institute is highly regarded within academic circles for its research on health policy.

The Department of Health website was searched for policy documents which are referred to in chapter one. Google scholar was used to access copies of documents found within the searches. The Bath University catalogue was searched to find book and theses on partnerships. Other literature was identified by academic supervisors. Once key authors had been identified, online searches were performed using the "find authors" functions. Pertinent references identified by the literature were sourced. Where authors cited from others' work, the original work was consulted wherever possible. Where it was not possible to consult the original work, this is shown within the referencing.

The Association of Research Managers and Administrators (ARMA) annual conference provided a source of networking opportunities to talk to leading research managers to identify any unpublished work in this area.

Throughout the review, the term 'health research' is used interchangeably with 'clinical research and medical research'. The term health research is not meant to imply any particular epistemological or ontological bias, but is meant in this review to be all encompassing and to include basic, applied and experimental health research.

2.3 Definitions of partnership

The word partnership is a 'contested term', with little agreement as to definition. Challis *et al.* (1988) said that partnership "is a word in search of ways of giving it effective meaning in practice". Powell and Glendinning (2002) said, "Use of the term (partnerships) has been promiscuous..." and go on to point out the lack of agreement on how the term should be defined. Mackintosh (1992) argued that partnership is a concept in public policy that contains a very high level of ambiguity with the potential

range of meanings subject to conflict and renegotiation. Powell and Glendinning (2002) said that partnership was “A rhetorical invocation of a vague ideal”. Even the Audit Commission (1998) claimed, “Partnership is a slippery concept that is difficult to define precisely”.

Ling (2000) summarised the lack of agreement by stating, “Commentaries about partnerships exist from a variety of academic and non-academic sources. Collectively this literature amounts to methodological anarchy and definitional chaos”.

There are some working definitions of partnership worth exploring further. The Audit Commission (*op. cit.*) described partnership as a joint working arrangement where the partners:

- Are otherwise independent bodies
- Agree to cooperate to achieve a common goal
- Create a new organisational structure or process to achieve this goal, separate from their own organisations
- Plan and implement a jointly agreed programme, often with joint staff or resources
- Share relevant information
- Pool risks and rewards

These definitions of partnerships exclude contractual arrangements as these relationships are based on different premises from the voluntarism implied in partnerships. This voluntarism is the key that distinguishes the way in which decisions are made in partnerships – as opposed to contractual relationships where decision making is driven by whether you are delivering the contract, or having it delivered (Powell and Glendinning 2002). This recognition that voluntarism has been identified as a key to partnerships implies a degree of parity between the partners – for example, the sharing of ...risks and rewards and also that the partners are autonomous and able to act independently if they so wish and it is the need to ‘achieve a common goal’ that

brings them together (Balloch and Taylor 2001). The Audit Commission report (*op. cit.*) seems to imply equality in desire between partners to achieve that common goal.

Powell and Glendinning (2002) defined partnerships as “...involving two or more organisations, groups or agencies that together identify, acknowledge and act to secure one or more common objective interest or area of inter-dependence; but where the autonomy and separate accountability arrangements of the partner organisations are in principle retained”. They continue and state that as a minimum, there must be at least two agents or agencies with at least some common interests or interdependencies and that these agents or agencies would probably also need to have a relationship based at least in part on trust equality or reciprocity. As with the Audit Commission definition (Audit Commission 1998), Powell and Glendinning (2002) placed emphasis on autonomy and implied equality.

Other commentators suggest that working in partnership can be defined as those who: commit to working together for longer than the short term; aim to deliver benefits not possible by working alone or buying services; include a formal agreement of the purpose of the partnership and a plan to bind the partners together (Sullivan and Skelcher 2002). The ambiguity surrounding the definition of partnerships has been described by some as politically expedient. Roberts and Hart (1995) suggested that this ambiguity can be politically attractive - precisely because partnerships can mean so many different things to different people. Powell and Glendinning (2002) agree that this lack of a specific definition can be useful in that it allows for local flexibility and responsiveness to an issue and the solutions and can remain appropriate to the expertise and levels of trust of local partners.

Roberts and Hart (1995) also pointed out the moral overtones of the word partnership - it is difficult to be opposed to them because there is the sense that partnerships are ‘a good thing’. The word implies a benevolence not seen, for example, with the word ‘relationship’. Indeed, Paul Boateng, when Minister of State for Home Affairs, claimed that ‘partnerships’ is “one of those nice feely words beloved by politicians” (1999, quoted in Hudson and Hardy 2002). Trist (1983) states that partnership implies a moral

imperative – that it is the only way to address complex social problems. Mayo and Taylor (2001) echo this sentiment when they state that partnership as a term has a positive resonance and implies a measure of equality or at least balance and reciprocity between partners. Dickinson and Glasby (2010) suggest that this idea of partnerships being seen as a ‘good thing’, makes it easier for senior management to sell the idea of merger to their staff when it is packaged as a partnership – after all, nobody can be against an idea that is held to be fundamentally good and has some strong political imperatives around it.

However, the idea that partnerships are always a good thing is disputed by other experienced commentators: Popay and Williams (1998) point out that partnerships are relationships and relationships are about power and control. Pratt *et al.* (1998) add further that “...not all partnership behaviour is well intentioned. People cooperate to exclude as well as include. Partnerships can lead to cosiness which resists change. Agreement based on avoiding conflict can be seen as collusion.” Bauld and Judge (2005) also comment that the assumption that partnerships are benign can lead people to assume that those involved in the partnership are equal partners. In the case of Health Action Zones (HAZ’s), the focus of this work, this was clearly shown not to be the case. One of the key assumptions made about HAZ’s was that their creation mandated the position of agencies who had been pushing to work together and who were just waiting for ‘permission’ and support from central government. In fact, some HAZ areas were larger than envisaged, and brought together health and local authorities who had no experience of working together and who had no wish to do so. One expectation about partnerships – that they aid learning and the development of best practice by sharing resource and experience (Glendinning 2002) is disputed by Fenwich and McMillan (2005) who suggest that organisational learning may not best happen through partnerships and sharing learning and best practice, but rather from internal processes and focussing on existing strengths in the organisation.

2.4 Models and theories of partnership

Given the ambiguities identified with the definitions of partnerships, it is no surprise to find that there is as little agreement on the models of different partnerships. Indeed, it is difficult to agree a model of partnership when definitions are so contested. Hudson *et al.* (1999) state that the best that can be hoped for with regard to models and theories of partnership is for a realistic framework rather than a grand theory of partnership working. Theories for partnership working come from a number of different disciplines and Dickinson (2008) suggests that because of this, it is difficult to identify which theoretical drivers underpin partnerships within health and social care policy.

However, as with definitions, some authors have attempted to detail models. Powell and Glendinning (2002) described three models.

1. The first is based on the synergy or **'added values' model** – this model of partnership aims to increase the value created by a combination of assets and powers of the separate organisations – i.e. the partnership becomes more than a sum of its constituent parts.
2. The **transformation model** of partnership emphasises changes in the aims and cultures of the different organisations. For this model to result in equity of change rather than takeover and absorption though, presupposes equity of ability and willingness to change between the partners.
3. The third model – that of **budget enlargement** is a useful model to employ when the main problem is one of inadequate resources.

The Audit Commission (1998) provided detail on slightly more simple models of partnership. They described these as follows:

1. **Separate organisations** – here, resources are put in to creating a partnership that stands as a legal entity in its own right, independent of the 'parent partner' organisations. These are expensive to set-up and maintain, and are fraught with difficulties as the paths of accountability can be unclear.

2. The second model is to set up a **'virtual organisation'** – this type of organisation has much in common with the separate organisation above (e.g. own name and identity, separate staff who identify with and answer to the partnership rather than individual organisations) but they are not legal entities in their own right. It is common for one of the partners to employ the staff and manage the resources.
3. The third model is that of **co-location of staff from partner organisations**. This is a less formal model with staff continuing to be managed and resourced from each partner organisation. This model can work well in non-contentious issues, but the Audit Commission point out that it can lead to confused loyalties and is probably not suitable for managing large complex projects.
4. The least formal and simplest model is a **simple steering group** without dedicated staff or budgets. On the one hand there is strength in this model in that the outputs from the partnership must be ones that can be implemented through each partner's core mainstream activity. However, this strength is also its weakness in that the outputs **MUST** be implemented through mainstream activity – and in this way, will be competing with all the other agenda items for each organisation.

The Audit Commission has termed these descriptions 'models', but really what they are describing is different ways of operationalising aspects of partnerships rather than offering a model of partnership.

There are other models of partnerships, for example Pratt's model spectrum of commitment ranging from competition to cooperation, coordination and co-evolution (Pratt *et al.* 1998), Mckintosh's model built on synergies between organisations (McKintosh 1992), and Ling's model built on the requirements of the members (Ling 2000).

Sullivan and Skelcher (2002) described partnerships as being based on market, hierarchical or network principles –with the latter being the only one to require shared goals. However, there are different types of networks. For example, Reid and Iqbal (1996) described 'competitive networks' as being entrepreneurial, flexible and

opportunistic. Competitive networks are also exclusive, inviting members based on perceived need. Collaborative networks on the other hand, are more inclusive and concerned with legitimacy, but are less entrepreneurial and may only serve to rubber stamp the decisions taken by others. Reid and Iqbal do however caution that there is a danger that these collaborative networks deliver less than expected or than efforts and energies invested would appear to deserve. In a refinement to their model, Skelcher in collaboration with Sullivan (Sullivan and Skelcher 2002) proposes a model of partnerships based on an optimistic, a pessimistic and a realist perspective of approaches to partnership. The optimist believes that partnerships are about sharing a vision, that the partners are altruistically attempting to achieve this vision and it is all led by charismatic leaders. The pessimist approach to partnerships is characterised by the organisations needing to maintain or enhance their position, that the partners are driven not by altruism, but by personal or organisational gain and that the key factors at work are the power of individuals and the desire for survival. The realist approach to partnerships is to accept that collaborations happen in response to changing political and demographic and other external drivers; that all the partners realise that they need to change as society changes and that all are able to adapt to the changing environment.

This model is expanded upon by Dickinson and Glasby (2010) who add two further approaches to partnership – those of the pragmatist and the mimetist – those who borrow from others. This draws on the work of DiMaggio and Powell (1983) with their work on institutional isomorphism, who suggested that organisations can make decisions about models of working based not on the known effectiveness of the change, but because other key organisations have chosen a particular model of working. This model is incorporated into the five approaches of partnership working and is reproduced in table 2.1

Table 2.1 Five approaches to partnership working

	Why partner?	Key assumptions about partners	Key Factors at Work
Optimist	Achieve a shared vision	altruistic	Charismatic/boundary spanning leaders
Pessimist	Maintain/enhance position	Seeking personal or organisational gain	Power of individual partners and desire for survival
Realist	Respond to new environments	Realise need to change as society changes	Ability to adapt to changing environment
Pragmatist	Partnership sounds like a positive concept and hard for potential critics to argue against proposed changes	Others may object if real drivers were stated	Political and organizational drivers justified for positive outcomes for staff and end users
Mimetist	Automatic – others are doing it and it seems expected	Not sure about outcomes but working together must be good	Desire to improve, but imprecise and naive approach

(adapted from an original table by Dickinson and Glasby 2010)

Dickinson and Glasby (2010) do counsel that more work is needed on the meanings of partnerships in different contexts as the term is beginning to lose credibility.

2.5 The benefits of working in partnership

The formation of partnerships can have positive benefits. For example,

1. Partnership working allows for the effective use of scarce resources (Fear and Bartlett 2003).
2. Partnership working can tackle difficult policy and operational problems that it would be impossible for one agency to solve alone (Audit Commission 1998).

3. Partnership working can be driven by the perceived need for coordination of activities or services, or the need to provide a one-stop-shop (Audit Commission 1998).
4. Partnership working can also allow sharing of expertise and best practice in a way that would not be possible if organisations were not working in partnership (Glendinning 2002).
5. Organisations can go into partnership as a way of sharing the costs or risks of expensive projects (Audit Commission 1998).
6. Some partnership working is mandatory (e.g. agencies are obliged to work together in order to access funding). (Bauld and Judge 2005)

The formation of partnerships can mitigate some of the problems of working alone. Huxham and McDonald, who term this lone working 'individualism' (1992, quoted in Hudson *et al.* 1999), provide four pitfalls of individualism and extrapolate that working in partnership can mitigate these. The pitfalls are:

- Repetition, where activities that only need to be done once are duplicated by agencies;
- Omission, where activities important to more than one agency are not carried out – maybe because they do not come in to anyone's remit, or all agencies assume the other is working on them;
- Divergence – where the actions of the various organisations become diffused across a range of activities rather than used towards a common goal and
- Counter-production – where organisations working in isolation may take actions which conflict with those taken by others.

The Audit Commission (1998) suggested four main reasons for partnership working:

1. To improve coordination of service delivery
2. To tackle the 'wicked issues' - problems with complex causes
3. To remove perverse incentives
4. To gain access to external resources

Other reasons for partnership working are described as, wanting to transform goal and cultures, to create synergies or enlarge budgets (McKintosh 1992).

The ability of partnerships to work across boundaries and share resources means that issues that could not be solved by a single agency can begin to be tackled. The term 'wicked issue' was first coined in 1973 (by Rittel and Webber, quoted in Audit Commission 1998) and referred to core policy problems that could not be addressed by a single agency. Health inequalities are one such issue and the example of partnership working used to tackle this issue was the creation of Health Action Zones (Bauld and Judge 2005).

The creation of Health Action Zones illustrates another reason for partnership working, viz. to meet statutory requirements. This type of motivation can, however, lead to weak partnerships because the element of voluntarism that seems to be an important part of successful partnerships has been removed and replaced by an obligation (Audit Commission 1998). Other obligatory partnerships such as early years education and health improvement schemes have suffered from a lack of genuine commitment (Barnes *et al.* 2005). It has been argued that another reason for working in partnership is that working in this way has just become a core feature of English public services and that whilst the stated aim of the partnership is around improving access or services for the end users, the establishment of the partnerships may also simply be in response to a changing population, or availability of key services or other factors external to the end users (Glasby and Dickinson 2008).

2.6 Factors predicting success of partnerships

Within the academic literature and policy documents on partnerships it is possible to identify factors thought to influence the success or failure of partnership working (see for example Glendinning *et al.* 2002, Wildridge *et al.* 2004, Hudson and Hardy 2002). These authors, whilst differing in emphasis, do agree on some of the core elements required to make partnerships work.

- All partners need to be committed to working in partnership and to solving the identified issue. All partners need to be convinced that partnership working is the right approach to take to solve the issue. There needs to be a recognition that the partners have some interdependencies (Hudson 1999, Hudson and Hardy 2002, Rummery 2002, Powell and Glendinning 2002)
- The partners need to trust each other. (Audit Commission 1998, Powell and Glendinning 2002, Hudson and Hardy 2002, Rummery 2002, Cameron and Lart 2003)
- There needs to be a commitment to sharing resources. Resources from each partner need to be explicit and acknowledged as having equal utility for the partnership – even if the level of resource being put in from each partner organisation is of differing levels (Hudson 1999, Fear and Bartlett 2003)
- The partners have to be prepared to share information (Balloch and Taylor 2001)
- The partnership needs to have strong and charismatic leadership. This is particularly important in many public sector partnerships as they are voluntary and people working in them need to feel that the work they are doing is worthwhile (Holtom 2001, Fear and Bartlett 2003, Cooksey 2006a)
- Smaller partners need to be included and their contributions recognised (Hudson and Hardy 2002, Williamson 2001 – in Balloch and Taylor 2001, Audit Commission 1998)
- All partners need to agree what the partnership is aimed at delivering (Hastings *et al.* 1996, Balloch and Taylor 2001, Dickinson and Glasby 2010).
- Different expectations need to be recognised, acknowledged and negotiated (Means *et al.* 1991, Hudson 1999, Dickinson and Glasby 2010)
- There needs to be clear management processes for the collaboration (Means *et al.* 1991, DH 1998 Dickinson and Glasby 2010)
- Clear communication between (and within) partners is seen as the bedrock of successful partnerships (Cameron and Lart 2003, Hardy and Wistow 1989, Lankshear *et al.* 1999)

Callaghan *et al.* (2000) found that the history of two organisations 'partnership' working affected the efficacy of new partnerships and the extent to which organisations can draw on a positive history of working together influences the ease with which new partnerships can be set up. In other words, 'success breeds success'. This view supports work by Hudson (1999), which showed that trust was developed and was based upon successful experiences over time.

The strength of vision underpinning the partnership and the willingness of each partner to share that vision and recognise each other's indispensable role in delivering that vision is crucial to the success of partnership arrangements (Balloch and Taylor 2001, Dickinson and Glasby 2010). The partnership then needs to be capable of translating that vision into strategic objectives and be able to plan the actions necessary to meet those objectives (Audit Commission 1998, Hudson 2002). The studies cited in this section reported empirical evidence to draw their conclusions. The research used case studies, interviews, focus groups and questionnaires to collect data.

The lack of an agreed definition of partnerships means that partnership is one of those 'common sense' principles which risks reducing itself to no more than "warm words with which it is hard to disagree" (Hudson and Hardy 2002). As Ling (2000) notes, the literature on partnership comes from a variety of academic and non-academic sources with a common belief that everyone knows what is meant by partnership. Hudson and Hardy (2002) further warn that the distillation of the empirical work on partnerships reduces the principles to the "platitudinous and self-evident".

It is interesting to note the lack of evidence on which authors base their assertions of why partnerships do and do not work. For example, many authors claimed that trust was a key element for the success of partnerships and yet they only reference either each other, or the Audit Commission – a report which itself provides no references so it is not possible to see where the evidence comes from. Where authors have based their assertion about Trust on evidence, it is often because they have data that shows that lack of trust was one of the factors in a partnership not being successful and they have then extrapolated that to mean that *de facto*, Trust is important to being successful (Means *et*

al. 1991). One of the few authors to provide justification is Hudson (1999) from his empirical work on joint commissioning across health and social care, the data coming from interviews with stakeholders.

Rummery (2002) acknowledges the difficulties with the complexities around research on partnerships and the conclusions drawn, but asserts “...it would be facile to suggest that there are no unifying characteristics or themes that can be deduced from the empirical literature”. She claims that there are at least two defining characteristics of partnerships – firstly, the partners must experience a degree of interdependence and secondly, there must be a certain degree of trust between partners.

2.7 Difficulties of working in partnerships

As well as identifying factors influencing success, the literature also describes barriers to effective partnership working. For example,

- Many partnerships exist in name only and fail to realise their full objectives (Rummery 2002).
- It is difficult to merge organisations with different (or even similar) cultures and build effective joint arrangements (Hudson 1999).
- There can be structural barriers to partnerships such as legal barriers to pooling resources and information, and technical complexities around doing so even where the will to share exists (Balloch and Taylor 2001).
- The need to meet targets and achieve good results on performance monitoring regimes may encourage competition when really collaboration is required (Hudson *et al.* 1999).
- Agencies may have limited power to address the real issues and local distortions may skew identification of the issues to be addressed (Means *et al.* 1991).

Once established, partnerships may run into any number of issues preventing them delivering on their objectives. Hudson *et al.* (1997) offers the following points for consideration: It is no trivial matter to get partners to agree on what the priority issues

are. It can be difficult to get partners to share their different expectations of what the partnership is for. If this part of the process does not go well, it may be difficult to maintain the active involvement of all the partners. Partnerships without a clear remit may just become 'talking shops' and fail to deliver any real benefit. Deciding what type of resources each partner will provide and valuing these equally can be another challenge for partnerships and monitoring what the partnership actually delivers can be extremely difficult. Inadequate management and professional support for staff working in partnerships can mean that these posts do not deliver (Glendinning 2002, Means *et al.* 1991).

One of the weakest types of partnership are those set up purely to bid for new resources (Audit Commission 1998). There is a danger that the instigating partner will be dominant with other partners not having a real stake in the partnership, or any influence over how it runs. To solve this, the bidding partner needs to be able to persuade (and indeed, believe itself) that all the partners benefit from participation and that all the partners must be allowed to make a real contribution.

Partnership working can be extremely expensive for constituent organisations – not least in terms of the management time that goes into setting up and coordinating the partnerships (Audit Commission 1998). Often this time commitment of senior and middle management time is not recorded, making it difficult to quantify any costs versus benefits. Partnership working that takes place at the margins of the participating organisations can fail to achieve legitimacy within the main core business areas of the constituent organisations, leading to disinvestment (Balloch and Taylor 2001 - introduction).

Partnerships that leave existing power relations intact can be dominated by the more powerful partners (Balloch and Taylor 2001), with the smaller partners really just legitimating decisions made by those more powerful partners. It is important to note that even though partners need to share some degree of interdependence; this does not imply that the interdependencies are the same for each partner, or necessarily equitable (Rummery 2002).

Holtom (2001) identifies five different obstacles to partnership working:

1. Structural – particularly lack of co-terminosity and fragmented responsibilities
2. Procedural – different operational systems and planning cycles
3. Financial – different funding streams and budget cycles
4. Professional – range of differences around values and roles
5. Status and legitimacy - particularly between elected and appointed status

These five barriers to partnership working were explored by Walshe *et al.* (2007) when evaluating partnership working in palliative care. They found that these five barriers alone could be sufficient to destroy emerging partnerships. They comment that at no point in the National Institute for Clinical Excellence (NICE) guidance on supportive and palliative care are such barriers acknowledged. Dickinson and Glasby (2010) in a case study on the partnering of two mental health care trusts, suggested the following as reasons for the poor integration of the two trusts: the partners failed to identify the desired outcomes; there was a lack of transparency about the real drivers for the changes which led to a lack of buy-in from the staff groups; they sought to achieve unstated aspirations whilst working publicly to a different set of aspirations; they saw the partnership as a panacea to all current problems; they set over-ambitious goals and they failed to attend to practical details like the HR, estates and financial issues. The different models of partnership will raise different barriers and these need to be identified as potential sources of conflict at the beginning of a partnership process.

It can be difficult to choose which sort of people should lead and work in the partnerships for each of the organisations and the Audit commission declared that there is no person specification for such people. However, Means *et al.* (1991) in an empirical investigation of a collaboration to deliver a regional alcohol education programme found that the local sites were more successful where they had employed people with reticulist skills (networking and working across agencies), high level facilitation skills and marketing skills.

2.8 Evaluating partnerships

It is important to be clear about what is being evaluated and whether, even within one partnership, different or similar arrangements are being compared. For example, Means *et al.* (1991) describes a regional alcohol education network where coordinators were employed by each of the partner agencies purely to work within the partnership. However, the local terms and conditions for each of these coordinators varied. Some of the coordinators were in positions of seniority with the attendant levels of authority, responsibility and access to information, whereas others were in relatively junior positions unable to exert much influence within their organisations. This meant that the research team had to understand in detail the position of each coordinator before undertaking the evaluation of the programme.

There are many tools for evaluation designed and described by researchers in this field (Means *et al.* 1991, Hudson and Hardy 2002, Audit Commission 1998). However Glendinning (2002) comments that these tools are largely management tools to identify obstacles and progress in the process and objectives of the partnership. She argues that wider academic and public policy concerns need to be taken into account when evaluating the success or otherwise of complex initiatives such as partnerships and proposes a pluralistic approach to evaluation. This approach suggests taking into account context and 'generalisability'; stakeholders and success criteria; timescales; attribution and causality; and political considerations. She suggests this approach, as each stakeholder (both formal partners and others such as consumers) may have different views of the aims and objectives of the partnership and thus value different 'successes'. For example, apparent consensus may just mean that the opinions of the more powerful partners are dominating the setting of the agendas and processes (Balloch and Taylor 2001).

The complexity of successful evaluation of partnerships is also acknowledged by Judge and Bauld (2001) who propose a theory-based approach to the evaluation of complex initiatives. They argue that the primacy of experimental approaches for evaluation is often inappropriate for complex community based programmes. Instead, they offer a

model of mixed methods with careful triangulation of evidence based on a theory-driven approach. This 'theory of change' approach is defined as "a systematic and cumulative study of the links between activities, outcomes and contexts of the initiative" (Connell and Kubisch 1998, quoted in Judge and Bauld 2001). Judge and Bauld argue that taking this type of approach allows deeper understanding of highly complex systems. They further suggest that the term 'evaluation' should be replaced by the term 'learning', which whilst it is a less precise objective, does not carry with it the "unrealistic burden of excessive scientific expectation (of evaluation)". Dickinson (2006) takes this proposal one step further. Whilst she acknowledges that theory driven strategies are able to address the complexities of these evaluations, she cautions that realistic evaluation is required and proposes a combination of theories of change within a framework of critical realism.

El Ansari *et al.* (2001), whilst agreeing with the complex nature of these evaluations, and giving primacy to a theory based approach, does however state that randomised controlled trials and other experimental methods can be useful in some aspects of evaluating collaborations. He does however, caution that these are only suitable when the object and focus of the study are sufficiently narrow and does accept that community level initiatives rarely lend themselves to such constraining designs.

Theories of collaboration behaviour have been developed by game theorists, psychologists, economists and policy scientists with little effort to synthesize perspectives (El Ansari *et al.* 2001). A full evaluation of complex social interventions should take note of all these disciplines if it is to address all the possible outcomes and perspectives. Further, a consideration of when to evaluate at a macro level and when at a micro level are important.

2.9 Summary and Conclusions

This review would have been strengthened by the inclusion of more empirical research. This gap was partly due to searching for literature about a 'contested term', which meant that many different terms were used to describe partnerships. For example, in a

systematic review, Cameron and Lart (2003), identified 38 papers discussing 32 projects, but 'partnership' was not a term used in the title of any of them. The majority of these projects were evaluating the success of joint posts – usually joint social care/primary care posts and the evaluations were because of needing to put forward a business case for continuation of these posts. In addition, it is important to note that many of the evaluations of the partnerships in this literature were funded as short term projects by the New Labour government – who had set the imperative for the partnership working. Therefore this literature review is very UK centric.

The importance of future work on partnerships is neatly summed up by Fear and Bartlett (2003) who state, “the justification for the preoccupation with a time consuming process that is hard to evaluate, and that requires high levels of commitment and energy from participants, with sometimes uncertain returns, lies in the belief that collaboration creates a whole that is greater than the sum of its parts”. Therefore it is worth continuing with this work.

What is clear from this review is that the models of partnership working between the NHS and University Research Support Office have not yet been described within the literature, nor the structures nor drivers for such partnerships. Therefore this confirmed the need to start this work by mapping and exploring the models of partnership working which drove the first aim of this work. The literature did suggest a range of facilitators and barriers to partnership working in other settings that may impact on University and Trust working relationships. Issues such as the history of partnership working between the institutions, which showed the importance of a good history of previous endeavours (Callaghan *et. al* 2000), the structural barriers to partnership working which alone, can be enough to scupper partnership working (Holtom 2001) and the issues of Trust and Leadership (Powell and Glendinning 2002, Hudson and Hardy 2002, Rummery 2002) all appear to have powerful impacts on the ability of institutions to work together and these need to be explored in relation to University and Trust Research Support Offices working together. *Best Research for Best Health* (DH 2006) does suggest partnership working in the form of joint offices as a way forward for Research Support Offices and the other

policy drivers are equally as direct in their instruction to the NHS and Universities with regard to the need to provide a seamless service for researchers.

The policies behind access to the NIHR funding streams will drive partnership working between the NHS and Universities. The literature counsels that partnerships based purely on access to resources are weak (Audit Commission 1998) and may not deliver the benefits envisioned by partnership working. Research Support Offices should be alert to these issues and provide additional support to newly formed partnerships. These findings from the literature drove the second aim of this work which was to explore in more detail the factors that led to partnership working (or not), explore whether or not the identified facilitators and barriers applied to joint working between HEI and NHS Research Support Offices and identify the policy drivers that facilitated partnership working.

Chapter 3. Methods.

3.1 Introduction

This chapter describes the approach taken to the investigation of the different models of research management and administrative support for clinical researchers in Universities and NHS Trusts in England. As described in the review of the literature in chapter two, no literature was found about the types of partnership working between NHS Trust and University Research Support Offices. The policy literature does however describe a desire for the NHS and Universities to work more closely to facilitate health research in England. As so little was known about how such partnership working was, or could be, constructed between the HEIs and the NHS, the aim of this work was to map out the current models for research support and then to explore the reasons for the implementation of any joint working (or not joint working) of the models identified.

A two phase, mixed methods approach was taken to this investigation: a survey of research support offices in universities with a medical school to identify current models for support; and semi-structured interviews with research support staff with an aim of exploring in depth characteristics of these models.

Section 3.2 of this chapter describes the approach taken to the research and the reasons why this approach was thought to be appropriate. A critique of the methodology is provided in section 3.6 Sections 3.3 and 3.4 of this chapter describe how each phase of the study was conducted and outline some characteristics of the participants. Section 3.5 of this chapter discusses the ethical issues involved in this research.

3.2 Research design

This study aimed to explore and analyse current arrangements between Universities with medical schools and their partner NHS Trusts for providing research management and administration support to clinical researchers working across the two types of institutions. The reasons for restricting the survey to Universities with medical schools are as follows: an assumption was made that the greatest

concentration of applied health researchers would be found attached to these medical schools and their associated NHS Trusts, as evidenced by the amounts of biomedical research funding received by these institutions from the NIHR (NIHR website accessed June 18th 2011). In addition, the policy shift in biomedical and applied health research, driven by *Best Research for Best Health* was (and still is) towards creating centres of excellence and to concentrating resources in those areas. Consideration was given to including HEIs with nursing schools or other schools for the professions allied to medicine, but, given the focus on the new funding streams and the policy shift towards creating centres of biomedical research excellence it was decided to restrict the sample to medical schools offering both pre-clinical and clinical training only. This focus means that certain types of applied health research, and the research management arrangements for that research, for example public health research, health services research and social health care research are not covered within this thesis as these types of research are probably just as prevalent in institutions without medical schools.

A mixed methods approach was chosen, employing both quantitative and qualitative elements. The study was conducted in two phases. Phase one was a survey of senior research support staff in higher education institutions with medical schools and employed a largely quantitative approach. The results of this survey were used to inform the design of phase two, both in terms of the participants invited to participate in phase two and the areas of interest for the topic guide. Phase two was a series of semi-structured interviews with research support staff in the University Research Support Offices and NHS Trust Research Support Offices. A qualitative approach was employed for this phase.

There was no published work found about models of research support partnerships between University and NHS research support offices at the time of this work. Therefore, this work was exploratory in nature. The research questions were of a mapping and descriptive nature and lent themselves well to a survey and interview design. A survey was undertaken to provide a map and provide a picture of the current models of research support and guide the selection of participants for in-depth interviews. The qualitative interviews allowed for in-depth exploration of the phenomena under discovery (Bowling 1997), and provided a much richer depth of

information about the current models of research support provided in NHS Trusts and HEIs with medical schools in England.

This approach – a survey followed by in-depth semi-structured interviews - allows for triangulation of the data, adding validity to the findings. The strength of this data triangulation is that it allows for a denser description of the phenomena of interest than would have been possible if only a single data collection strategy was used (Yin 1994). This approach – combining both quantitative and qualitative approaches to research has come to be known as mixed-methods research. One definition of mixed methods research is: “research in which the investigator collects and analyzes data, integrates the findings, and draws inferences using both qualitative and quantitative approaches and methods in a single study or program of inquiry” (Tashakkori & Creswell 2007 p.3). Both paradigms – qualitative and quantitative are important and useful. The basic tenet of mixed methods research is that both qualitative and quantitative methods and methodologies can be useful when used to answer the right questions.

Quantitative approaches are useful when the question concerns efficacy, or causality. The ability to isolate and manipulate discrete variables and to quantify the outputs can be powerful when deciding if one treatment is better than another. For this reason, for example, the randomised controlled trial has become the design of choice when trying to decide which treatment option offers patients a longer life, or less side effects or remission of disease. In these cases, the elements under consideration can be measured – to a greater or lesser extent (Roberts and Dicenso 1999). What is seen can be counted and reduced to data points for analysis. Surveys, which use standardised data collection methods, are quantitative in nature. Surveys are particularly appropriate when the aim is to document prevalence (Bowling 1997). The survey in this work was designed to collection information and describes the current models of research support. Thus this survey is cross-sectional (the data were collected at one point in time) and descriptive.

However, should the question change to one of exploring perceptions or reasons for certain choices or behaviours, it quickly becomes apparent that these types of issue cannot be measured and that a different approach is needed. Qualitative research is

extremely powerful when it comes to describing exploring or explaining phenomena being studied (Ploeg 1999). The richness and depth of qualitative data contrasts and complements the breadth of quantitative data.

For decades, researchers have debated the relative merits and weaknesses of both quantitative, positivist paradigms and qualitative, constructivist paradigms. At times, the debate has become polarised with the proponents of each paradigm entrenched in their views. Mixed methods research, with its pragmatic view of employing either paradigm where it fits best offers a way through these paradigm debates. This ability to sidestep the contentious issues debated between the paradigms is one of the strengths of the mixed methods approach (Feilzer 2010). Feilzer further claims that the mixed methods approach is particularly well suited to solving practical problems in the 'real world' and allows researchers to be free of any constraints imposed by the artificial choices between positivism and constructivism. Mixed methods research is common within health sciences research which aims to explain behaviours and perceptions as well as cause and effect (O'Cathain 2007).

The differences between the two paradigms have led researchers from both sides to claim that they are inherently incompatible (Lincoln and Guba 1985, Schrag 1992). Studies are biased at the outset by the norms of the paradigms within which they are set (Barber 1983). These biases in approach to the right data to collect, the way in which it should be collected and analysed and reported are set by the prevailing norms of the paradigm within which the study is located. As the underlying philosophies of approach are so different, the researchers above claim that it is impossible to combine the approaches with any scientific rigour or credibility.

The two approaches do however, have much in common. Both quantitative and qualitative research use empirical observations to address research questions; both describe their data and construct explanations from their data; both approaches incorporate safeguards into their designs to minimise bias (Johnson and Onwuegbuzie 2004). As such, Johnson and Onwuegbuzie (2004) reject claims that qualitative and quantitative approaches, because of their epistemological foundations are inherently non-compatible. Instead, they argue that a more pluralistic or compatibilist approach can lead to choices of combinations of approach that

maximise the ability to answer research questions. Thus, the combination of approaches offers great flexibility to pragmatic researchers able to use either approach as the research questions warrant.

A short survey was chosen first as an attempt to gather information about the current range of models of research support in England. The questions used are reproduced as appendix 3.1. The intention was to use the results of the survey to draw up tentative models to be investigated in more depth using the interview. The strength of a survey is that it enables researchers to study a representative sample and seek to describe elements that are common across organisations and thus provide generalisable statements about the object(s) of study. With a survey, it is possible to document the norms, identify extremes and delineate associations between the data (Gable 1994). Surveys are also replicable, thus providing for a high level of confidence in the sensitivity and reliability of the instruments.

Interviews were chosen for the in-depth exploration of the models as one of the areas of interest within the interviews was to investigate the relationships between the University and the partner NHS Trusts. In-depth interviews were chosen rather than structured interviews to allow for the focus to shift both within individual interviews and between interviews as needed. A topic guide was drawn up ahead of the interviews, based on the main areas of focus and shared with the participants ahead of the interviews (appendix 3.2) The interviews allowed the researcher opportunity to explore in depth the meaning of the responses the participants gave. Main questions, asked of all respondents were probed in different ways according to the responses given. Focus groups were considered as an option to collect this in-depth data but were rejected for the following reasons:

1. Confidentiality – several institutions in London were selected for interview and these are institutions that may be thought to be in competition with each other for research funds. It was felt that the respondents may not be so open – particularly about areas that were not going so well if they were sitting in a group with their peers from competitor organisations

2. The aim was to explore in depth the different models for research support and therefore it was more appropriate to speak to people individually about the models in place in their institutions.

3.3 Research aims

The aim of this study was to explore research management and administration support structures between Higher Education Institutions with medical schools (HEIs) and their associated NHS Trusts and to identify factors that contribute to the establishment of the chosen model of partnerships in research management and support in these sectors.

The objectives of this work were to:

- Map current research management arrangements locally and nationally within England in HEIs with medical schools and their associated NHS Trusts
- Identify the key characteristics of different models of research management partnerships and the factors that contribute to different models of partnerships in research management and support

3.4 Phase One: Survey of research support staff in higher education institutions with medical schools

This section details the population for the survey, the sampling strategy and how the participants were identified.

The population for this survey was Directors of research support employed by HEIs with medical schools in England (n = 24).

Directors of research support in England were chosen because *Best Research for Best Health*, whilst making reference to the devolved nations and to providing a strategy for UK research, is not a UK wide research strategy and applies to England only. Secondly, the NIHR funding streams, which drive the need for formal partnerships between Higher Education Institutions and the NHS, were only available to research leads based in England. Thus this survey sampled only those directors of research support in HEIs with medical schools in England.

The Senior Administrative Heads of Research Support Offices were identified by:

- a) The professional contacts of the researcher and the practice-based supervisor
- b) Website searches
- c) Telephone calls to Research Support Offices within HEIs with a medical school in England

3.4.1 The survey questions

The conceptual framework for the survey questions was generated by a review of the literature and expert input into the form, content and design of the questions. The practice supervisor and academic supervisor provided some expert input. The survey questions are reproduced as appendix 3.1.

Questions for the survey were drawn up based on the roles of Research Support Offices described by Langley (2007), the list of sponsor responsibilities defined in the Medicines for Human Use (Clinical Trials) Regulations 2004 (S.I. 1031, Crown Copyright, 2004) & the research governance framework (DH edition 2 2005), and the Audit Commission (1998) descriptions of partnership (Audit Commission 1998).

The questions included: Whether the Research Support Office supported clinical trials and which phases of clinical trials were supported (see glossary). The survey then asked people to describe the functions their office supported and who took responsibility for aspects of the governance of research. The respondents were asked to describe their relationship with their main NHS partner selecting from a list of possible descriptors. The respondents were also asked to rate how effective they thought their current structures were.

All of the questions included an 'other' free text box to allow for the possibility that the available choices did not reflect the situation in that institution.

The completion tool for the survey was designed in *Survey Monkey* (www.surveymonkey.com) – an online completion tool available for a small fee. This method of data collection allowed for online completion, provided a professional layout and ensured data entry errors were only made by the respondents when

completing the survey and not the researchers inputting data. This method of collection also suited the method of request for participation which was by email. In this way, the respondents received the request to participate and were able to click on the link to take them to the survey from within the email. The target population was Directors of research support in universities in England with medical schools.

3.4.2 Validity and reliability

To increase the validity and reliability of the survey, it was piloted with three HEI Research Support Office staff – two from the University of Bristol, and one from Imperial College London, prior to launching the survey. These people were chosen because the directors of research support in these HEIs are actively involved in the professionalisation of research management, have published in the field of research management and administration and are keen to promote research within research management. The staff chosen to pilot were known to the practice based supervisor and the researcher.

The purpose of this piloting phase was to ensure that the terminology used was correct and readily understood and that the questionnaires did not create an unacceptable burden of additional work. In addition, these pilot sites were asked to comment on the proposed methods for collecting the data, in particular the use of an online data collection tool versus a paper copy of the survey. These piloting sites were asked to complete the final version of the survey, although different members of staff were asked to complete the final version.

These three staff suggested some changes in wording and all thought that the online completion would be more likely to produce a response than a paper version.

3.4.3 Recruitment of participants

Given that the number of participants available to take part in Phase One was limited, it was essential to use all strategies available to ensure the fullest participation possible. The researchers had an advantage in that both the principal investigator and the practice-based supervisor are members of the population of interest, and thus were assured of understanding the study group (Boynton 2004). Professional

and personal networks were used as necessary to increase recruitment to the study. Boynton also recommends that the method of administration is carefully chosen to appeal to the study population. Research managers and administrators make extensive use of email and on-line sources of information and all have a good level of competency in these technologies. Therefore an on-line survey company was used and approaches to the participants were made initially by email.

Survey monkey provides templates that can be used to enhance the appeal of the survey – questions look neat and there is one question per page (Puleo *et al.* 2002). The survey was piloted to ensure that the language and the questions were appropriate and not ambiguous (Sapsford 1999). We worked and re-worked the questions following piloting to ensure they were as concise as possible and relevant to the study population (McColl *et al.* 2001) and removed questions that weren't thought to be absolutely essential to the need to map the current models of research management.

The participants received the request to participate in an email from the researcher directly to their personal email accounts. Participants were not compensated directly for their participation but were offered copies of the results of the analysis of the survey work.

3.4.4 Data collection

Data were collected directly from the Directors of research support through a self-completed on-line survey.

A link to the online survey was sent to the Directors (or equivalent) at each Research Support Office. As the request was sent in the last week of the Christmas term (10.12.08), a deadline of four weeks was given (06.01.09). A reminder email was sent two days after the deadline had passed (to allow time for respondents to return to work after the Christmas shut-down and have dealt with their initial work-load).

Questionnaires were not completed anonymously; therefore it was possible to see which HEIs had not responded. Targeted personal telephone calls were made to non

responders to find out if they intended to respond or were not interested in participating.

3.4.5 Response rate

The response rate was 100% (n = 25/25).

3.4.6 Data management

Data from participants were collected using *Survey Monkey* – an on-line survey tool that allows data to be exported in a table format suitable for importing into spreadsheets, thus reducing data entry errors. All questionnaires were returned in this format – thus no data needed to be entered by the researcher.

3.4.7 Data analysis

Data were imported into *Excel* from *Survey Monkey*. This allowed all the data to be viewed together and allowed for ease of calculating frequencies and other descriptions of the data. The data were reviewed. Each question had allowed an 'other' free text box and therefore, where entries into the free text box contradicted the selected tick box answer, a judgement could be made about whether to re-code data. Where this happened, this re-coding is described in detail in the findings and analysis chapters. The analysis plan to report frequencies and other descriptive statistics was followed and the data are presented in tabular form. The sample size was too small to allow for even basic bivariate analysis of relationships between the data points.

3.5 Phase Two: Semi-structured interviews with research support staff in Universities with Medical Schools and in NHS Trusts.

This section details the approach taken to the interviews; the participants selected to take part; the topic guide; how the data were collected and characteristics of the chosen participants.

3.5.1 Analytical approach

The approach taken to the interviews was an interpretivist approach – that is, concerned with the content, meaning and context of the data. Qualitative research allows the creation of categories and does not need enumerating to be useful. The approach allows for the collection of a range of diverse data.

The analytical approach was iterative. The design of the study focussed the work on the area of interest and sets boundaries for what was and was not explored. At the sampling and recruitment phases, this focus was further refined and issues of interest began to be explored with the participants. The data were then formally analysed before refining further prior to reporting.

This type of approach is appropriate when the research questions are descriptive – for example concerned with describing or mapping. Qualitative approaches are also powerful when the study is concerned with answering questions about how and why.

This phase of data collection was designed to investigate further why certain types of partnerships between the Universities and the associated NHS Trusts had been established the way they had and what could be learnt from this to inform decisions about how and when to establish partnership working between the NHS and the Higher Education Sector for supporting research.

3.5.2 Potential participants

A broad range of views and contexts was sought during this phase of the study. The potential population was all staff who worked in University or NHS Trust Research Support Offices. The results from the survey highlighted several self-described models of partnership working between the NHS and the HEI Research Support Offices.

A total of 14 staff in 9 different NHS Trusts and University Research Support Offices were interviewed.

In addition, one interview was undertaken with a department of health civil servant to provide confirmation of the policy context at the time of the interviews. This interview was not coded and loaded into the framework.

3.5.3 Participant selection

Purposive sampling in order to cover the range of models and levels of experience was used during this phase. Participants were selected in order to provide data on different models of research support structure and function identified from the answers given to the survey in phase one. Participants held a range of research support positions. The interviews were conducted with operational research managers, senior research administrators (at Head of Department or Director level), Senior Research-Leader Managers (for example Directors of Research) and senior executive managers – for example a Chief Executive Officer (CEO)- of an NHS Trust. Participants were also selected to balance staff in London University and Trust partnerships and staff outside London.

The people chosen to take part were emailed to ask for their agreement to participate in this phase of the research.

Of the 16 people invited to take part in this phase of the research, 15 agreed to take part. The person who refused had just resigned from their job and provided the name of a colleague to interview instead. Characteristics of the participants are shown in table 3.1 below.

Table 3.1 details characteristics of the participants, whether they worked for an NHS or HEI whether the interviews were conducted face-to-face and the gender of each of the respondents.

Table 3.1 Characteristics of participants, institutions and interviews

Institution id/ London or Provincial	NHS/University	Face-to-Face or Telephone	Male or Female
1/Provincial	NHS	Telephone	F
2/Provincial	University	Face-to-Face	F
2a/Provincial	NHS	Face-to-Face	F
3/London	University	Face-to-Face	M
4/London	NHS	Face-to-Face	F
5/London	University	Face-to-Face	F
6/London	University	Face-to-Face	F
6/London	University	Face-to-Face	M
7/Provincial	NHS	Face-to-Face	M
9/Provincial	NHS	Face-to-Face	M
9a/Provincial	University	Face-to-Face	F
9a/Provincial	University	Face-to-Face	F
9a/Provincial	University	Face-to-Face	F
10/London	University	Face-to-Face	M

Fourteen Interviews were carried out over a 9 month period between September 2009 and June 2010. Interviews lasted between 25 and 90 minutes with an average time of 48 minutes. The fourteen people interviewed worked in nine different institutions. Four of these institutions were based outside London and five in London.

Nine women and five men were interviewed. Eight of these people worked in provincial cities and six in London-based institutions. Five people were employed by and working in the NHS and nine were employed by and working in the University sector.

13 of the 14 interviews were conducted face to face with the respondent at a venue of their choosing. The remaining interview was conducted over the telephone.

3.5.4 Topic guide

A topic guide for the interviews was drawn up for use during the interviews (appendix 3.2). This type of semi-structured approach allows for some structure for the interviews and comparability between subjects, whilst still allowing flexibility to probe when appropriate. The people taking part in this stage were sent the outline topic guide by email as part of the request to participate.

3.5.5 Data collection

Data were collected by conducting in-depth, semi-structured interviews. All of these participants gave explicit consent for the interviews to be recorded. Data were recorded on a Sony Ericsson e850i mobile telephone. There was an additional interview with a civil servant, performed to confirm the context for this research that is not reported in the table above. This interview was not recorded as the respondent did not give permission. Extensive notes were taken during the interview and these notes were checked by the respondent for accuracy.

The recorded interviews were transferred to a password protected computer, checked for audibility and the original recordings deleted from the mobile phone. The interviews were also stored on a password protected NHS server as the server provided security against accidental access or erasure. The recordings will be deleted on successful completion of this doctorate. The recordings were also transferred to a professional transcriber who deleted the audio files on receipt of payment.

3.5.6 Data management and analysis

This section details how the data were transcribed; how the data were managed with framework and how the researcher began to make sense of the data using the framework matrix based approach.

3.5.6.1 Transcription and approach to analysis

Data were sent over a secure, web-based file-sharing site to a professional transcriber. There have been claims that the error rate can be high if the researcher does not carry out the transcribing (Poland 1995). However the risk of errors going uncorrected were lessened as it was the principal investigator doing both the interviews and analysis. The interviews were transcribed using an “intelligent verbatim” approach. This approach transcribes the words verbatim, but does not include every pause word – such as ‘umm’ or ‘er’. This approach is supported by Halcomb and Davidson (2006), who question whether verbatim transcription of interviews is necessary for researchers other than those working in a pure qualitative paradigm. Interview transcriptions were read through whilst listening to the original

recordings of the interviews and errors that might have affected the understandings of the conversations were corrected. The main errors though, were errors in acronyms, so 'FSF' (flexibility and sustainability funding) became 'FFF' in the transcriptions – these were not corrected as it was clear from surrounding text what was being referred to. Transcriptions were labelled with participant study identification letter and institution identification number. The interview transcripts were sent to each participant with the study identifiers removed and replaced with the date of the interview. No participant asked for any changes to their transcripts.

The method of management and analysis used for the data generated by the interviews in phase two was *Thematic Framework Analysis (framework)* (Ritchie *et al.* 2003). This is a matrix-based method for ordering and synthesising data. The approach allows for thematic analysis without losing the case context.

The approach in *framework* applies order to the data. It is a way of classifying data, not judging the importance. A grid chart for each theme and associated sub-themes is created, in this case using *MS Excel 2007*. Each main theme has a chart. Sub-themes are columns and cases are rows. This allows for reading down the framework thematically whilst still keeping individual case stories whole.

There are two key stages to *framework analysis*; managing the data and making sense of the evidence.

3.5.6.2 Managing the data with *Framework*

There were five processes employed during the framework analysis to help manage the data (Ritchie *et al.* 1993);

1. Familiarisation with the data:

The transcripts were read through several times to ensure understanding and familiarisation with the transcripts. The interviews were listened to at least twice and sometime more often if, during analysis, context had to be checked.

2. Devising a conceptual framework:

The first three interview transcripts were coded in terms of what each section of the transcript was describing, independent of the topic guide. The themes and sub-themes did include elements from the topic guide, but also included additional themes directly from the data. Then, these codes were written onto cards, one for each code and were grouped together until all codes were placed within a theme. Duplicate codes were discarded. Then, the themes were ordered so that each theme had an overarching descriptor, with sub-themes underneath. This hierarchy of themes did not imply any sense of relative importance. At this stage, the data were still being managed.

Themes were chosen to be broad enough to hold the data, whilst not being so broad that they encompassed everything. Sub-themes were discarded if they only fit one case. Each theme had a sub-theme of 'other' to hold the data that didn't fit into any of the agreed sub-themes. In this way, the potential risk of discarding data that didn't fit was mitigated.

The process of agreeing themes and sub-themes was done by the researcher and the academic supervisor. The framework was then charted using *MS excel 2007*.

3. Applying the framework systematically to the raw data:

First, the framework was tested with three interview transcripts to ensure that all data could be located within the framework. Some sub-themes were re-named and some were removed. The main themes remained the same. Then, the framework was loaded with all the data.

Each transcript was read through systematically and each section of the transcript (a section could be a sentence, or a paragraph) was located into the appropriate theme. This was done by using the comments tool with the review tool bar in *MS Word 2007*. Each section of the text was highlighted and a comment box inserted. Data were either synthesised at that point, or a verbatim quotation was copied and pasted into the comment box. The case

identifier and transcript page number were then added to the comments box and the contents of the comment box then copied and pasted into the appropriate cell in the framework grid.

All data from all transcripts were loaded into the framework which had been created using *MS Excel 2007*. An example framework is reproduced as appendix 3.4. This was to ensure that all data were available for analysis. The 'other' category was used within each theme for data that did not fit obviously within any of the sub-themes at this stage, but clearly belonged to the higher order theme.

At this point in the application of the *framework*, the aim was to keep the data within the excel cells close to the original data – the test of this would be that participants should still be able to recognise their own transcripts at this point – although this was not tested during this study. The purpose of this first level of abstraction is to reduce the amount of data and organise it into a format suitable for analysis. The conventions used to explain the data were: normal text = summary of data by researcher. Italicised text = verbatim quotation. CAPITALS = comment by researcher.

The data were then Sorted by Theme or Concept, to locate material with similar concepts together. A resource document, adding context to each of the themes was produced as a guide for the researcher.

4. Summarising and Synthesis of the data: Data were then summarised to describe what was thought to be being described by each sub-theme.

These last phases of analysis were done by the researcher alone.

5. Making Sense of the Data with Framework

There were three key steps in making sense of the data:

Detection: The first level of abstraction stayed close to the data – i.e., at this stage of abstraction, if shown, the participants would have still been able to recognise the descriptions. At the second level labels were assigned to the data and interpretation began.

Categorisation: The labels became more abstract and themes and concepts began to be combined. This was an iterative process and raw data were checked continuously during this stage to ensure that the data backed the emerging categories. At this point, the data were searched for emerging typologies.

Classification: At this stage, the researcher began to verify associations between the data, employing frequency counts where appropriate, interrogation of patterns of association and investigation of cases that did not fit.

Following these three steps the researcher was able to begin to develop explanations. Again this was an iterative process backed by re-checking the data – both the synthesised, and where necessary, the raw data. The explanations developed were both explicit and located within the participant's data, and implicit – that is, inferred by the researcher.

The approach to the analysis of the data was a combination of inductive and deductive. The inductive approach came from creating the codes for the framework directly from the data. The deductive elements were in using the topic guide to further refine those codes and themes.

3.6 Limitations

In this section, the limitations of the approaches taken to data collection are discussed. Firstly, in order to keep the survey as short as possible so that the respondents could answer it easily and in one sitting, forced choice answers were used where longer text responses would have revealed more detail. As this survey was self-administered, there was no option to explain any ambiguous questions or for the respondents to seek clarification. It is not possible for the researcher to know how each respondent has interpreted the question. In this way, the survey approach is

inflexible – once administration of surveys is underway, it is usually not possible, nor desirable, to correct ambiguous questions or add in missing vital questions. Surveys are limited in their ability to discover new data – that is, in order for the questions and available responses to be clear in the self-administered survey, the researcher must make choices about what they think the range of responses might be. In this way, surveys are better instruments of verification than discovery (Gable 1994). Surveys administered in this way presuppose that a) the respondents have an opinion on each of the items asked, and b) they are prepared to share that with the researchers.

Surveys only provide a snap-shot in time. There is very little information available on the underlying meaning of the information. Also, some variables of interest may not be measurable by this method. Semi-structured interviews have limitations too. The structure of semi-structured interviews – i.e. that they follow a topic guide with the possibility for exploring some topics in more depth - can be criticised for being too open and too closed. It can be argued that a more open style of interviewing may mitigate some of the interviewer biases by allowing the content of the interview to follow a more fluid and open path. Semi-structured interviews may concentrate so closely on the pre-set agenda that there is a danger of missing important information or content. Conversely, the flexible nature of semi-structured interviewing – in that it allows both the interviewer and the respondent to deviate from the topic guide to explore some topics in more depth - can also create problems if the purpose of the research is to gather differing views on the same topics as there is a danger that some topics may not be covered in all interviews.

The advantage of using a professional transcriber, apart from speed, was that the entire interviews were transcribed and thus available for analysis. Therefore no early decisions were taken about which data were and were not explored within the analysis. However the disadvantage of this approach is that detailed re-familiarisation with the data had to take place during analysis which may not be necessary if a researcher gains that complete familiarity with the data whilst transcribing.

Coding of the transcripts and loading them into the framework by the researcher alone could be criticised as not providing for reliability of coding. Patton (2002) suggests that having more than one person coding and agreeing emerging themes can provide triangulation of data analysis. However, as coding of qualitative data is inherently subjective, Morse (2006) suggests that trying to achieve consensus between coders can dull the ability to truly understand and represent the data. The approach to coding and identification of themes is discussed in some detail above. Also, rather more pragmatically, as will be discussed further in the section on ethical considerations below, the researcher was asked not to share raw data in the form of transcripts or audio recordings with the practice based supervisor.

3.7 Ethical considerations

The protocol for this study was approved by the University of Bath School for Health Research Ethics Committee. The main ethical considerations were those of conducting research within the peer group of the researcher and issues of confidentiality. Although many of the respondents were unknown to the researcher, some were known as colleagues from events attended, or colleagues from whom the researcher sought advice on occasion.

The clinical health research management world in England is small. There are only 23 medical schools offering pre-clinical and clinical training in England and most of these identify with one partner NHS Trust. Each University is an independent body and with the changes in NHS research funding, each NHS Trust effectively competes for the funding pot.

The researcher and the practice-based supervisor are well known within the research management field and both asked regularly to speak at NHS and HEI research management conferences. This may have led to participants feeling obliged to take part in the research and it was important to reassure them that they of course did not have to do so.

It was important to be able to assure the participants of confidentiality with their data. The mechanics of maintaining confidentiality of the raw and transcribed data followed tried and tested methods. All electronic data were kept on secure systems behind passwords and server protection.

It was important that the participants felt as free as possible to share with the researcher their experiences of partnership working between the NHS and the Higher Education Sector. In order for this to happen, assurances were made that neither the institution nor the participant would be identified within the thesis. The institutions would not be listed. On receipt of their transcripts, two London based interview participants requested that London not be referenced in any quotations either as they both felt that linked with certain references they had made that either they or their institutions might have been identified. This request has of course, been respected. This has however restricted reporting of the data. For example it is not possible as a result of these assurances for comparisons to be made between institutions within London, or compare between London and provincial institutions. This assurance of confidentiality has also led to the adoption of rigid descriptions of institutions and interviewees. All Higher Education Institutions (HEIs) are referred to as universities, despite some being called colleges. All leaders of the Universities are called 'Vice-Chancellors' and their deputies Pro-Vice Chancellors. All administrative leaders of Research Support Offices are referred to as 'head of joint office' or 'head of University office' or 'head of NHS office' – even though some have a title of Director. All academic leaders of Research Support Offices are referred to as research directors. No other identifiers are provided with the quotations used to illustrate the analysis other than title.

Assurance also had to be provided to some participants that raw data – i.e. the transcripts and audio recordings would not be shared with the practice-based supervisor. The practice-based supervisor did not see the data until it had been summarised and synthesised into the framework. Despite these assurances, one person interviewed did not agree to be recorded and one allowed recording but refused to answer questions about what they thought was and was not working well.

3.8 Summary

This chapter has described the mixed methods research design of the study and explained why such an approach was appropriate. The steps taken to collect the data, through the use of an online survey and semi-structured interviews have been described. The analysis of the data, with the descriptive statistics of the survey data and the thematic framework of the interviews has been detailed. The ethical considerations of peer research and confidentiality have been discussed. The next two chapters will describe the findings of the study. Chapter four describes the results from the survey and chapter five describes the findings from the interviews.

Chapter Four. Results from phase one: The Survey.

4.1 Introduction

Chapter three described the methods used to collect and analyse the data from the online survey which was emailed to Directors of Research Support in 25 Universities in England that had medical schools. A reminder email was sent two days after the deadline to those who had not responded. If there was still no response, phone calls were made to the Research Support Offices to check receipt of the request and to ask for a delegate to complete the survey if the Director did not have time. After 20 responses had been received, a final email request was sent by the practice based supervisor. The assumptions made in designing this survey were: that governance type responsibilities would be devolved out to NHS Trusts; that the HEI Research Support Offices would concentrate on development of new research and managing grant income; that a variety of models of partnership working between HEI Research Support Offices and NHS Trusts would be reported; and that a variety of relationships would be reported.

4.2 Response rate.

This approach to requesting participation resulted in completed surveys from all 25 invitees: a 100% response rate.

Of those 25, one institution did not provide support for clinical research as it was an undergraduate only medical school (question two) and one was a Research Support Office only providing support to an institute which was part of a Higher Education Institution – in this way, this office was similar to a faculty Research Support Office and the survey was aimed at the core central research support functions of the institutions. The data from these two responses have been removed from the data set and the following results report on the remaining 23 responses.

4.3 Characteristics of participants

Not all of the responses were from the people originally sent the survey. Six Directors passed the survey to an operational manager to complete. 17 of the respondents were (self-described) Heads of Department or Directors of Research Support. Six of the respondents were operational managers. 13 of the respondents were male and 10 were female.

4.4 Responses to questions

Table 4.1 describes the number of responses and completion rate for each question.

Table 4.1: Completion rate for each question in the survey.

Question Number	Number of Responses	% Completions Rate
1	22	96
2	23	100
3	22	96
4	19	83
5	22	96
6	23	100
7	22	96
8	21	91
9	23	100
10	6	26
11	23	100
12	17	74

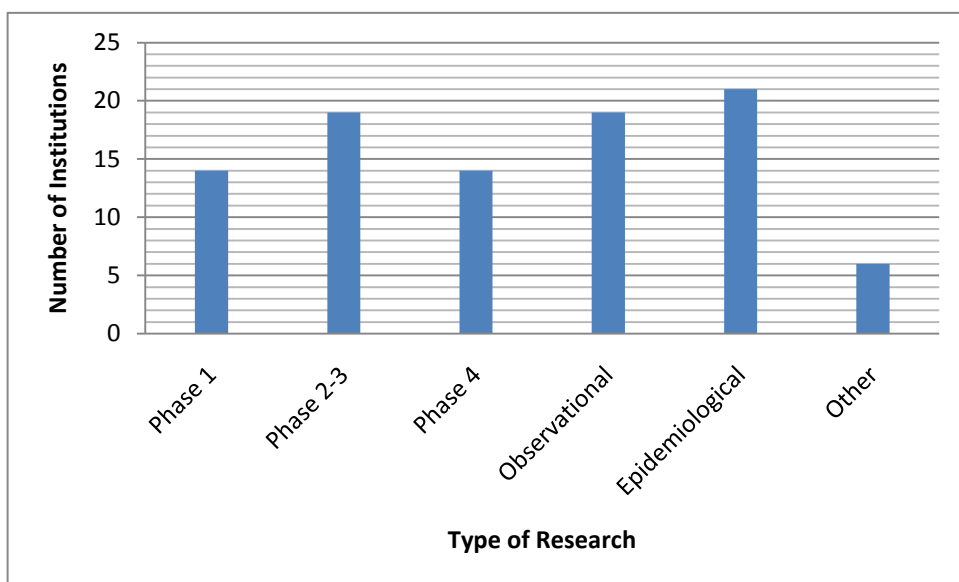
As can be seen in table 4.1, the majority (10/12, 83%) of questions elicited an 80% response rate or better. The mean completion rate was 88%. Question number 10 was a question designed to give respondents more space to elaborate on question nine if they needed to. Six (26%) of respondents chose to use question 10 to elaborate on their answers. Question twelve was a free-text response to the question of whether they were considering re-structuring and if so, how. Question one asked respondents to provide their contact details. All but one person did this and this enabled the researcher to email them and thank them for completing the survey. The one person who did not complete this section was acting up as Director of the Research Support Office and did provide

other identifiers through the questionnaire. The response to this question provided the evidence that one Research Support Office was an institute within a larger HEI and therefore was not an appropriate respondent for this particular questionnaire. Question two checked that the Research Support Office did, in fact, provide research management and administrative support for clinical research. This question was used to confirm that the right people had been approached to complete the survey. If they answered no to this question, they were thanked and asked not to continue with the survey. As described above, this question enabled the researcher to identify the other inappropriate participant.

4.4.1 Types of clinical research supported.

Respondents were asked to indicate what types of clinical or health research they supported within their institutions. The options were: phase 1 clinical trials, phase 2-3 clinical trials; phase 4 clinical trials; other therapeutic, non investigational medicinal product (IMP) trials; observational research, epidemiological research and other. Responses to this question are shown in Figure 4.a below.

Figure 4.a Type of clinical research supported by each Research Support Office



This question was answered by 22 respondents.

Nearly all the institutions (21 of 22) support epidemiological research. Slightly less (19 of 22) support non-IMP interventional trials and phase II-III research. Fewer (14 of 22) support phase I and phase IV research – also known as post-marketing research. The ‘other’ category described devices trials and non-IMP clinical trials. The phases of clinical trials are described in the glossary.

4.4.2 Structure of Research Support Offices

Respondents were asked to describe the structure of their Research Support Offices and were given options of describing themselves as ‘centralised’, ‘devolved out to departments/schools/faculties’ and ‘other’.

The responses were:

- Centralised Department n = 17
- Devolved Department n = 3
- Combination of centralised and devolved n = 1

However, the free text box attached to the question revealed that actually different models were being described. For example, one of the respondents who had ticked devolved department, then added “but with critical links to the central office”. This was re-coded as a combination department. Another respondent who ticked a centralised department added “with support from staff based in each faculty”. This was also re-coded as a combination department. Once recoding was complete, the responses changed to:

- Centralised Department n = 11
- Devolved Department n = 1
- Combination for centralised and devolved n = 11.
-

4.4.3 Functions of the Research Support Offices Respondents were given a list of possible functions for Research Support Offices and asked to indicate which of these functions were solely the responsibilities of the Research Support Office and which

were devolved out to operational teams. Table 4.3 details the responses to this question.

Table 4.2: Functions of the departments

Function	Research Office N=/% response	Devolved to operational teams N = /% response
Research Strategy	15/68	11/50
Horizon scanning for funding opportunities	16/73	9/41
Benchmarking	18/82	5/23
Bid and Proposal Development (scientific case)	8/36	20/91
Bid and Proposal Development (financial costing)	16/72	13/59
Identifying NHS support costs for clinical research	9/41	17/77
Identifying NHS treatment costs for clinical research	9/41	16/73
Ethics approvals – applying for	12/55	15/68
Ethics approvals – ensuring these are in place	17/77	11/50
Regulatory approvals – applying for	11/50	15/68
Regulatory approvals – ensuring these are in place	18/82	9/41
NHS Trust (R&D) approvals – applying for	7/32	16/73
NHS Trust (R&D) approvals – ensuring these are in place	15/68	11/50
Invoicing	13/59	6/27
Post-award management – expenditure control	12/55	11/50
Post-award management – audit/monitoring of projects	15/68	8/36
Audit	16/73	6/27
Regulatory inspections (e.g. medicines and healthcare products regulatory authority (MHRA))	16/73	10/45
Networking with funders	17/77	17/77
Portfolio management	12/55	12/55
governance	18/82	18/82

22 respondents answered this question. Functions of Research Support Offices are wide ranging and varied. No function was performed by all offices. The functions devolved out to operational teams also varied. Question five in the survey asked respondents to indicate which functions they supported centrally with regard to clinical research and which functions are devolved out. The descriptor of to whom it was devolved ('operational teams') was left deliberately wide so as to allow for devolvement to researchers, other administration functions or external partners (e.g. NHS Trusts). Interestingly, there was no single function that all of the 22 respondents ticked as the responsibility of their departments. The highest ranking functions for the central teams (n = 18, 90%) were governance and ensuring regulatory approvals were in place. These were followed by benchmarking, ensuring ethics approval was in place, and networking with funders (n = 17, 89.5%). At 80%, (n = 16) and 75% (n = 15), were horizon scanning for funding, financial costing of proposals, audit, regulatory inspections and Research strategy, NHS Trust approvals, and post-award management. The least common functions for the Research Support Offices were: scientific case for proposal development (n = 8, 38.1%), and identifying NHS treatment and support costs (n = 9, 45%). In addition, only seven (33.3%) provided support with applying for NHS R&D approvals. These were devolved out to operational teams. It can be seen from the table above that respondents did sometimes select both the central team and the operational teams as being responsible for providing functions. This may indicate that either the responsibility is shared and the central and operational teams work together to provide a service, or that the function is performed by the operational team and perhaps checked by the central team, or that it varies on a case by case basis. From the design of this question, it is not possible to clarify this with respondents.

4.4.4 Associated NHS Trusts

Question six asked the respondents to name which NHS Trust(s) their University was associated with locally. This question allowed respondents to name more than one Trust and was answered by all respondents. 19 respondents named more than one Trust. The respondents were then asked to name the NHS Trust they considered to be the main

associated Trust. One respondent chose not to answer this question. However, the other 18 respondents who named more than one Trust were able to select a main associated NHS Trust.

4.4.5 Sponsorship responsibilities

Respondents were asked to complete a list of possible sponsor responsibilities and indicate if the University, the Trust, the Research Team or some other body was responsible for those sponsorship duties. Table 4.3 shows responses to the question: “With regard to clinical research, which organisation is responsible for the following sponsorship duties?”

Table 4.3: Sponsorship duties

Sponsor Duty	University	Trust	Research Team	Other
Review of protocol	11	10	11	1
Managing Finances	16	9	6	1
Agreeing Contracts	20	13	1	0
Regulatory Approvals	16	13	6	0
Insurance	19	11	1	1
Pharmacovigilance (including adverse event reporting)	8	12	12	0
Monitoring Progress	11	11	13	0
Monitoring Compliance	15	12	8	0
Training Research Team	9	10	11	1
Resource Availability	13	9	10	0
Dissemination	8	6	17	1
Other				

Table 4.3 describes the data returned in response to a question about sponsorship responsibilities. Two respondents chose not to answer this question.

These data are difficult to derive conclusive results from. It is clear from analysis that the issue of sponsorship prompted a variety of responses, from those who clearly placed each responsibility with one body, to those who allocated responsibilities to more than

one body. This could demonstrate the complexity of sponsorship as a concept for Research Support Offices. This is a key area of business for Research Support Offices as it encompasses both governance and performance of research. Despite the importance of this area however, it is clear from the responses to this question that there is a fragmentation of response to sponsorship. Despite piloting the survey, the responses to this question allowed for more than one choice of response. The definition of a sponsor in the Research Governance Framework (DH edition 2 2005), is “the individual, organisation or group taking on responsibility for securing the arrangements to initiate, manage and finance the study”. Although sponsorship duties can be delegated, each responsibility must rest with an individual institution, individual or group. This question maybe should have either forced a choice, or perhaps have included the wording ‘ultimate responsibility’. What may be being described here is the respondents lack of understanding about the accountabilities and roles of a sponsor of clinical research, or that they did understand these roles and the way this question was phrased did not allow for a response that suited their local arrangements.

One institution did comment in the ‘other’ free text box that the answers given did assume the University was acting as sponsor and answered accordingly. Five other respondents commented that the responsibilities were delegated on a case by case basis so the question was not easy to answer.

4.4.6 Working relationships between HEI’s and associated NHS Trusts

Respondents were asked to describe the relationship between their Research Support Office and the Research Support Office within their main NHS trust(s). Respondents were asked to tick just one option, although there was also an option of ‘none of the above describes our relationship’ to ensure that as many different models as possible of working together were captured. Table 4.4 details the number of respondents who described their model of current relationship with their main NHS Trusts

Table 4.4: Relationships with main NHS Trusts

Types of Office	N =
single office (i.e. one identity, one head of department shared premises, shared staff)	1
joint office (shared staff, shared location)	2
joined office (we work closely together, have a contract or SLA in place to agree responsibilities and roles but we are separate entities with separate leadership)	6
joined office (we work closely together as above but do not have an SLA or contract in place)	2
joined (we work closely together, have some shared processes and share some information)	0
separate (but we communicate well on issues of importance)	10
separate (we communicate when we have to, but apart from that we leave each other alone)	2
Separate (we have little or no communication with associated Trust R&D offices)	0
None of the above describes our relationship (please see next question)	0

Respondents were asked to choose which description of relationships best described their relationship with their main NHS trust (even the one respondent who would not name one Trust as the main Trust did answer this question). All respondents were able to choose one of the descriptions to describe their relationship with their main trust. These descriptors were taken from the Audit Commission descriptors of partnerships (Audit Commission 2004).

Only one respondent described a single office. This is expected, as the single office would need to hold legal status to be able to act on behalf of the institutions. Although more will probably move in this direction due to the creation of Academic Health Science Centres, at the time of this survey, those centres had not been decided. The most common (n = 10, 45.5%) relationship was described as a 'separate relationship, but we communicate well on issues of importance'. The second most common (n = 6, 27.3%) relationship was that of a 'joined office that works closely together, with a contract or Service Level Agreement (SLA) in place to agree responsibilities, but we are separate entities with separate leadership.

Two (9.1%) institutions described their relationship as ‘separate, we communicate when we have to, but apart from that we leave each other alone’. These two institutions were dissimilar in size and age. Respondents were then given the opportunity to expand on their answers if this wished. Six respondents chose to use this question as an opportunity to expand on their response to question nine. Five of the six respondents explained why they were separate offices and one expanded on the contractual relationship they had with their NHS Trust.

4.4.7 Effectiveness of existing structures.

Respondents were asked to say how effective they thought their existing structures were, using a four point scale of very effective, effective, somewhat effective or ineffective, in dealing with the current clinical research agenda. Four institutions thought their structures were very effective. Ten described their structures as effective and nine described their structures as only somewhat effective. No respondents described their structure as ineffective.

Seven of the ten who described their structures as only somewhat effective described their relationship with their main NHS Trust as ‘separate, but we communicate well on issues of importance’. The other three described their relationship as ‘joined – we have a contract or Service Level Agreement (SLA) in place but we are separate entities with separate leadership. In contrast, three of the four who described their current structures as very effective had either a single structure or joined office with shared staff in a shared location. Only one of these ‘very effective’ used the ‘separate, but communicate well on issues of importance’ description of their main NHS relationship.

4.4.8 Potential for re-structure

The final question in the survey was an open-ended text response asking respondents if there were any plans for restructuring research services. Thirteen respondents reported that there were plans and two respondents said that there were no immediate plans. Eight respondents did not answer the question. All ten of those who described their

structure as only somewhat effective were considering re-structuring their departments and relationships in the near future. Eight of the ten described a move towards joint working. The respondent who reported a single office stated that the department was under constant review.

4.5 Summary

This chapter describes the main findings of the survey and discusses some of the limitations of this survey. The survey confirmed that Research Support Offices vary in their structure, functions and relationships. A wide range of functions are performed by Research Support Offices as illustrated in the answers to the questions about functions. There are some similarities, with most (75% plus) of departments being responsible for research strategy, horizon scanning, post-award management, benchmarking, ensuring regulatory and ethical approvals are in place, audit, inspections and networking. However, functions such as bid and proposal development (scientific case) and expenditure control were carried out by fewer offices.

Differences between offices were shown in whether or not support was given for applying for regulatory approvals and supporting researchers to identify NHS treatment and support costs. Only 45% (n = 9) of the Research Support Offices provided support to researchers with these functions. The rest of the Research Support Offices devolved this responsibility to the research teams.

Both the key questions about structure of their office, and the question about sponsorship responsibilities provided inconsistent responses. The question about the structure of their office needed to be re-coded where free-text answers contradicted their tick box answer.

In terms of structure, three main models were described within this survey – a centralized model with all research support provided from a centrally funded and located Research Support Office, a devolved model where most research support activities were provided from research support teams located within the schools or

faculties of each institution, and a combined model of a central function supported by school and faculty based staff. These different structures contribute to the development of the typology in chapter five.

Most of the University Research Support Offices described either a joint, joined or otherwise strong relationship with their main NHS Trust (separate, but we communicate well on issues of importance). Only two HEI Research Support Offices described a weaker relationship (separate, we communicate when we have to, but apart from that we leave each other alone). None of these were associated with how effective the structure for research support was thought to be.

The question about sponsorship responsibilities was asked to explore one of the assumptions made in designing this piece of work - that NHS Trusts are good at and lead on governance issues and that HEIs are good at and lead on research development issues. However, the way this question was set up, without a forced answer or a qualifier statement meant that the analysis of the responses to this question is inconclusive. The listing of 'governance' in the question about functions of the department received the highest score of all the functions performed by these University Research Support Offices, with 90% of respondents stating that their office is responsible for governance. However, with no expansion on what is meant by governance, this function was open to interpretation.

It has to be considered that a number of different limitations may have influenced this phase of the work. Firstly, the responses were not anonymous. This may have led to respondent bias in answering question about how effective they think their office is – both those who have invested effort in changing their structure, and those who are planning to re-structure may have been tempted to answer in the way that would best suit their purpose – i.e. those who have invested much time in recent restructures might not want to say that their current set-up is ineffective. Those who are keen to undertake a re-structuring, would not want to say that their current structure is very effective as this would undermine their future plans.

The bias in the types of questions chosen is directly related to the assumptions held by the author. As can be seen with regard to the question on sponsor responsibilities, this did lead to inconclusive data.

The ambiguity of some of the questions plus the need to recode the answers given based on the free text responses meant that it was important to be able to probe further some of these issues around form and function of the research support offices, and around the relationships with their NHS partners. Therefore the survey results and the models identified within them were one of the elements used to select people to participate in the second phase of this work: the semi-structured interviews. Participants were chosen to reflect both the NHS and University Research Support Staff, based on the answers given to which NHS Trust is the main associated Trust. Participants were chosen from those who were working in self-declared joint offices and those working in separate offices. The question about the relationship between the NHS and University elicited a range of responses and participants were also selected based on that full range of answers. A balance between London-based institutions and provincial institutions was also sought.

The next chapter (Chapter 5) reports the findings from the semi-structured interviews carried out with fifteen respondents which were aimed at understanding in more depth the structures in place for research support, the drivers for those structures and the relationships between the HEI Research Support Offices and the NHS Research Support Offices. The survey results were used to identify:

1. Joint offices
2. Separate offices
3. Those reporting good relationships with their NHS partners
4. Those who did not report good relationships with their NHS partners

Then, chapter six reflects on the findings from chapters four and five and relates them to the current literature, discussing the findings and drawing some conclusions.

Chapter Five: Analysis and findings from Phase Two: The interviews.

5.1 Introduction

This chapter presents findings from 15 semi-structured interviews conducted with Directors of Research, Heads of Research Support Offices, Chief Executive Officers in the NHS and senior executive University staff. The findings in this chapter also refer back to data from the survey where appropriate. The interviews were done to explore further some of the questions raised by the survey results – in particular to explore the structure of the Research Support Offices, the relationships between the NHS Trust research offices and the HEI Research Support Offices and any drivers that led to the models of working currently in place for research support between HEIs and their local NHS Trusts.

The first section of this chapter describes the main themes and sub-themes. The framework method for data management was used to identify these themes as described in chapter three. The overarching themes described in the first section of this chapter are:

1. Structures and functions
2. Systems used to manage research
3. Relationships, history and culture

The second section of this chapter describes the drivers for the models of joint or separate working currently in place for each of the Research Support Offices explored with the participants. These drivers have been identified through analysis as:

1. Executive level vision and desire (Vice Chancellor and Trust Chief Executive Officer)
2. Director level implementation
3. Capacity and Opportunity
4. History
5. Trust
6. Policy

The final section introduces a tentative typology of Research Support Office partnerships between the NHS Trusts and their partner Universities. The evidence

provided for this typology is drawn from both the interview data and the survey data. Three are identified and described: joint offices, collaborative offices and separate offices.

As discussed in chapter three, the assurances given of confidentiality to the participants has resulted in the need to adopt standard naming conventions for all participants and institutions so neither the people, nor the institutions, can be identified. Table 5.1 lists the naming conventions used. The titles are explained in the text underneath the table.

Table 5.1: Naming conventions for people and offices in chapter five.

Post or Structure	Naming Convention	Abbreviation
Executive Lead of the HEI	Vice-Chancellor	VC
Deputy to the Executive Lead of the HEI	Pro-Vice-Chancellor	PVC
Executive Lead of the NHS Trust	Chief Executive Officer	CEO
Administrative Lead of the Research Support Office	Head of Research Support Office	HRSO
Academic Lead of the Research Support Office	Research Director	
Other research support senior administrative staff	Research support Manager	RSM

The need to ensure confidentiality has led to the need to describe the participants in proscribed ways, rather than using the titles they are given within their institutions. Therefore, within this chapter the following naming conventions are used: the executive leader of all HEIs is described as the Vice-Chancellor. Deputies to this role are described as Pro-Vice-Chancellors. The executive lead for an NHS Trust is described as the Chief Executive Officer. All heads of Research Support Offices, whatever their title, are referred to as Head of NHS Research Support Office or University Research Support Office or Joint Research Support Office. This title is used if these people are the most senior administrator in their Research Support Office structure – regardless of their background, which for some is from within

research but for others is from a business background. All research management and administration departments, which tend to be called 'research and development office' in the NHS, but have a myriad of titles in HEIs are re-named 'Research Support Offices'. In the first two sections of this chapter, the designation of 'joint' or 'separate' Research Support Office tallies with how the interviewee has described their partnership set-up. In section three, once the typologies have been explained, the designation follows one of the three typologies identified.

All other research support staff are given the title of manager – for example HEI Research Faculty Manager or NHS research manager or Joint research manager. Anyone referred to as a Director of Research is a current academic with a management role.

5.2 Themes and sub-themes

This section describes the themes identified during analysis of the interview transcriptions. The first theme to be discussed is titled structure and function with the sub-themes of leadership, roles and responsibilities and location and history illustrating this theme. The second theme is that of systems and processes for managing research. Within this theme, financial systems and processes and regulatory systems were the most apparent themes. The final theme in this section is concerned with relationships, history and culture. Culture has been divided into the following sections: culture of chance, priorities and shifting agendas.

5.2.1 Structures and functions

The first main theme to emerge from the interviews was that of the importance of structure. Within the overarching theme of structure the following sub-themes were identified:

1. leadership
2. roles and responsibilities
3. location and history

5.2.1.1 Leadership

Leadership was described in three ways by these interviewees: administrative leadership of the Research Support Office, strategic research leadership and executive leadership.

Administrative leadership for the Research Support Office (Heads of Research Support Offices)

Both within the NHS and the HEI's, the Research Support Offices were headed by a senior administrator. These people had various titles and levels of seniority within their institutions, although all were at a senior level. Within the HEI's, this level of seniority ranged from one level below the pro-vice chancellor to those reporting to a Dean of a Faculty/School – typically the Dean of the medical school. The NHS heads of Research Support Offices were also senior within their institutions, with NHS heads of the research offices typically reporting to the Director of Research, who was most commonly a clinical academic reporting directly to one of the executive directors of the Trust. As all of the NHS people interviewed for this study were working within secondary and tertiary care and not primary care, the NHS institutions will be referred to as NHS Trusts.

Strategic research leadership for the Research Support Offices

The Heads of Research Support Offices were supported in the strategic leadership of research by a senior academic with a management role. Within the NHS Trusts, the role was performed by the Research Director. Two of the Trust research directors also held a role as director of research for the faculty of medicine. Within the HEI's, this strategic function was supported by either a Dean of the HEI or a Pro-Vice-Chancellor or a Director of Research. One Research Support Office did not report a clinical academic as strategic research lead, but rather a senior research administrator only. This joint office provided all the governance and management of clinical research but not the strategic direction for research, nor support for grants and contracts or the delivery of the trials.

Executive leadership for research

Respondents in the joint offices described a range of models for the strategic leadership of research outside of the Research Support Offices. At one end of the spectrum there was full representation and integration at executive level from both the HEI and the Trust on the research strategy committee, headed by a joint director of research, with both the Vice Chancellor and the Trust CEO sitting on that committee. Then, at the other end of the spectrum, a model of research committee was described as that of a HEI research committee only, with no NHS representation – despite the medical school and the Trust funding a joint office providing administrative and research management support for researchers both in the NHS and the HEI. This research committee had no formal executive leadership of research

It is very very University tilted, so I am not quite sure what authority the Trust would have if it came to it. There is no strategic research culture in the Trust.
(Head of Joint Research Office)

There were other models of strategic research committee described. Similar to the inclusive model above, one research committee had membership including the CEO of the Trust and the PVC research on the HEI side and was described as “having the great and good from both sides on it.”

Then less inclusive models were described in that NHS Trust representation on the strategic research committee was provided solely by clinical academics working as both HEI-employed clinical academics and clinical consultants working in the NHS. Whether they knew they were representing both institutions was not explored. In this model, the respondent went on to say that the CEO of the Trust was key in not driving forward a partnership with the HEI; this respondent felt that the CEO paid ‘lip-service’ to the idea of joint working but was really not signed up to it at all.

5.2.1.2 Roles and responsibilities

This theme describes the types of roles and responsibilities of the Research Support Offices. There was no common model for these with no Research Support Office undertaking all Research Support functions. Respondents described a range of

functions within their departments and how those functions related to the staff structures within their departments.

Prior to the joint office, there were two offices – a University grants finance office and a trust R&D office – those traditional roles still carry over to a certain extent. The joint office is now split into three teams – University grants and contracts, financial admin, governance and clinical trials and a separate trust finance team that are co-located but do not report in to me (Head of joint Research Support Office).

The joint office described above undertook all financial administration and grants and contracts for research, in addition to governance and clinical trials. Trust finances were dealt with separately to the joint office but the staff did sit physically within the joint office to aid communication. This office did not lead on research strategy which was done through a University-wide research committee.

A second Research Support Office, self-described as a joint office, managed grants and contracts and the NHS approval aspects of research management. A different model is one in which the University central Research Support Office takes responsibility for all the financial work and leaves only clinical trials and governance with the joint unit. However, the joint unit, which had been established to deliver patients into trials and monitor the progress of the trials running within the unit, became, with the changes in the way the NHS has been funded for the NHS support costs of research, more responsible for financial management as well. This financial responsibility has led to the joint unit building a strategic element for its work as well.

Accounting and financial responsibility sits with the University. Support with grant applications sits with the University. Governance of research sits with the joint unit. There is a move towards more responsibilities for the joint unit – so, for example they manage the delivery funds coming from the networks so they now have a change of role from one of gatekeeper to support for all elements of research – there is more strategic decision making around the use of resources and prioritizing important pieces of work – their strategic committee is gaining a powerful role in steering research direction as word soon gets around about which projects have been turned down. (Head of University Central Research Support Office)

Although the people interviewed from the HEI partner in this set-up did not consider they had a joint office and only a joint clinical trials unit, it was clear that some elements of research management and administration beyond running trials was moving to this new joint venture.

5.2.1.3 Location of research support staff

Four models of location are described by the participants:

1. Co-location of NHS and University research management staff
2. Location of some, but not all NHS and University research management staff
3. Location of some University research management staff within the NHS Trusts that house their clinical academics
4. Separate locations

The self-described joint Research Support Offices housed staff providing research management and administration services to translational and applied health researchers in both the NHS and the University. These staff were located in a single physical base. The support provided to the HEI staff however, was generally for staff in the medical faculty only and there was an additional central research support function for other faculties and for some aspects of research within the medical faculty – for example, large strategic initiatives and complex funding or contract negotiations. These offices did however provide all of the research support for the NHS Trusts and the Trusts did not have any additional administrative support for research outside these co-located offices.

The Research Support Offices that did not provide research management and administration to both institutions did not share a single location. However, that did not mean that all of these staff were housed in isolation to each other. One of the newer partnerships, where agreement to work towards a joint office has been agreed at Trust CEO and University VC level, is going to locate two University research managers with their partner NHS trust research managers. Of the other separate offices, one of the Universities houses research managers within the NHS Trusts that house their academics, though not with the NHS research management staff and the last separate office has plans to do the same.

Co-location of staff, however, did not necessarily mean that staff worked for both institutions. This model of working was also described by another head of a joint office. Two other joint offices did have different methods of working, with staff working along functional lines, so, for example, staff supporting costings of grants, did so for both institutions, and governance was similarly done for both sides by the same staff. In these offices, the separated staff worked in finance with some working for Trust finance and some working for University finance offices.

Yes. We have a joint research office now which came into being two years ago ... and it's split into three teams. So we have a team which is University Grants and Contracts, financial administration, and you can interpret this how you like in terms of jointness, you've got this and we call it a joint office and we have a team which deals with clinical trials, management, governance, approvals, blah, blah, blah, for both the University and Trust and we have a team called the Trust Finance which does exactly what it says on the tin. Now the first two teams directly report into me, that third team Trust Finance does not. It's physically co-located here and we have a very good working relationship but there's no formal line management as such with that. (Head of Joint Research Support Office)

5.2.2 Systems and processes for managing research

This section describes the findings from the interviews with the participants around which systems are used for managing research and whether these systems are common to both the NHS and the Universities or not.

5.2.2.1 Finance systems

Most of the discussions around systems referred to finances and funding, with some reference to governance and regulatory systems. The descriptions of finance systems and the issues these caused for relationships between the NHS and the Universities illustrate some of the complexities of managing research across two agencies.

These complexities can refer to who should have how much of each grant in terms of who pays the employment costs; one respondent described their arrangements for the new NIHR funding streams and said that the NIHR money is retained in the Trust. The PI's are budget holders and have access to the funds. This respondent also described the system for paying money into the University and said that some money was transferred to the University to pay for PI time, but...

we are trying to keep it clean so that the Trust does not feel as though the University is sucking all the money out because there needs to be a benefit to both to ensure the relationship continues (Head of Joint Research Office)

There is also complexity around the initial costing and agreement of costs and prices to go into grant applications. PI's and Universities are now used to using their own full economic costing systems, but there was evidence from some respondents that HEI research support staff and the researchers do not understand fully the various categories of costs in the NHS, such as support costs and excess treatment costs. It was felt by some respondents that this lack of understanding can cause difficulties not just between the two institutions, but also between the Research Support Office staff and researchers. A typical quotation around this issue follows:

Excess treatment costs cause problems because the University do not understand these costs and the costs need to be met by the commissioners and the researchers are sent back to do that. So, if you want to do that research project you need to find the money, and it's really unsupportive because I hate doing that. (Head of Joint Research Office)

This issue is then compounded when the funding bodies decide to change the categories of costs. Respondents described the issues of funders reallocating costs between categories – commonly re-designating research costs as treatment costs, or support costs - as problematic. This re-designation of costs shifts the burden of the costs from the funder to the NHS – either to the delivery funds provided to each NHS Trust by their local comprehensive research network, or to the commissioners of patient care. This re-designation, which happens after the NHS institutions involved have agreed the costs of the grants, can cause some delays in trying to then get the grant started and can cause conflicts between the researchers and institutions and between research support staff working in the different partners.

The finance systems and the method by which institutions report spend via those systems is also different between the universities and the NHS. In simple terms, the NHS runs a 12 month financial year from April to March with all income and spend accounted for in that 12 month year. Money is not meant to be rolled over into the next financial year and it is extremely difficult to overspend in one year and recoup the money in the next year. Standing Financial Instructions (SFI's) in the NHS mean that only income received in advance of need can be carried forward. Grant funding

can fit into this category, but not always explicitly. The NHS financial model is one that intends all money received in one financial year to be spent within that financial year; allowing spend against grant budget where the expenditure does not match the income can be problematic for the NHS, as finance staff are learning new skills to manage grant budgets. The NIHR funding streams allocate money in equal amounts paid quarterly in arrears, and in many institutions within the NHS, income has to physically hit the accounts before spend is allowed.

In contrast the HEI financial year, which runs August to July, and the systems used within HEI's to manage grant funding mean that the University has more flexibility and understanding of the way research income flows. The Universities tend to report to their funders on actual grant expenditure, so it is in their interest to report when they have front-loaded expenses in a grant, for example by purchasing expensive equipment, something that is often required.

The new funding streams, paid to the NHS, often require money to be transferred for the HEI services or costs. The different approaches to the management of research finances can lead to challenges. This issue was raised by many respondents. As one HEI research support manager described it,

...income coming to the NHS and then moving to the University is not working well. The University runs against budget and expenditure and the NHS runs on income. So, in the NHS, don't spend a pound until receive a pound, where in the University if you have a budget for a pound you can spend it because we assume it is coming. So we have invoice disputes because we have spent more than the NHS has received and they can't pay. (Head of HEI Faculty Research Support Office)

These accounting issues have led to some NHS institutions increasing their finance support for research. One has doubled the number of accounting staff from 1.5 Whole Time Equivalents (WTE) to 3 WTE to manage grant income. However, these increases do not seem to come without resentment that the growth in research activity is being subsidised from the patient care budgets in the NHS.

The NHS has huffed and puffed a few times about adopting a FEC model for research and it needs it because nothing funds the full economic costs of research (in the NHS). The NIHR is finding a growth in research activity and if you have a growth in activity, you know, if you sweat the assets harder, but nevertheless

there will be an increase in the amount on the ground, capital asset and there's nothing funding that. So, somewhere research is being subsidised by the hospitals which choose to get involved in research (Head of NHS Research Support Office)

That sense of resentment and not quite trusting each side around finances and whether all sides are getting everything they are entitled to is also referred to by both sectors. Commonly, the issue was illustrated by referring to how commercial research monies were not transparent to both sides.

It is unfair in the way commercial money gets put through the NHS and the University don't see any of it (Head of HEI Research Office)

Other tensions apparent between the NHS and the Universities which appear to be caused by the different approach to financial management, are around the employment of staff and the different systems for the approval of new posts. The interviewees described systems within the HEIs that allowed for the appointment of new staff once the grant had been awarded, but that the NHS needed the money to physically hit the account first before they would allow the appointment of new staff.

This approach to the employment of research staff can cause major difficulty for new research teams. Some NIHR funding streams (for example the HTA funding streams) will not generally release money from the grant until ethical approval for the work is obtained. However, with PI's being unable to employ research assistants to help with this pre-recruitment work, this stage of the work can take much longer than it should. This is not such an issue for established research teams but can be a major barrier for teams just beginning to establish themselves.

Even in the most integrated of the joint offices, the finance systems are completely separate and are worked on by separate staff. The joint offices all use the University finance systems to run grants through. This has been possible because of a joint approach to setting the budget for each grant application which has been transformative. The joint offices have taken a pragmatic approach to the tensions in having separate finance systems; they employ separate finance teams to work on the separate systems. They tend to run grants wherever possible through the University systems. It was common for the university respondents to believe that grants were better run through the University partner.

Grants are better run through the University side as that's where most of the researchers are and they (the University) have the structural processes and systems to deal with them. The trust just have an accounting department. (Head of Joint Research Support Office)

This separation of people with expertise in the different systems, does however, lead to other problems. In an attempt to bring HEI research support and NHS research support closer, and provide a better service to researchers, one partnership decided to place a University research manager within the NHS to support University researchers. It was not a success;

University employed research unit manager trying to work within the NHS, didn't understand the systems, therefore didn't do things properly, therefore things happened very slowly and the Trust is blamed. (Head of NHS Research Support Office)

The frustration that NHS finance systems are just not yet fit for administering grants and grant applications was shared by an NHS Research Manager:

Finance systems are just not speedy enough to cope with grant applications – for example, over a certain amount, only the FD (Finance Director) can sign off the application – that sometimes does not happen in time for the deadlines. In contrast, the University is well advanced in systems to manage grants and they know how to account to their funders ...The new NIHR systems are not clear on what they monies are to be spent on (Head of NHS Research Support Office)

It was apparent from at least one respondent that University finance departments are not viewed as completely facilitative; indeed it would seem that the finance departments are the ultimate arbiter of what researchers can and cannot do:

It's not the nature of that particular beast (the finance department) to work with people. Its job is to enforce rules and regulations with standing instructions 'you must do this, you mustn't do that' again, like R&D is about governance and management, that is what finance is about. (Head of HEI Faculty Research Support Office)

The historical funding arrangements between NHS Trusts and Universities, known as 'knock-for-knock' are almost completely opaque arrangements between the NHS and the Universities for sharing resources – most notably people and facilities. The clinical academics need access to patients and NHS facilities, in return for which they provide valuable clinical services to the NHS. Students from the Universities are taught by NHS consultants. Most of these services do not result in any significant

money changing hands. The changing economic climate is forcing both the NHS and the University sector to re-evaluate these historical arrangements and this was raised as an issue in many of these interviews:

I think some of the tensions between the ... are generated about money because we do find I think that some of the trusts kind of demand bits of the overheads and stuff like that and there is a sort of...I think it's because the financial models are so different, quite often there's a tension around the budget and who is getting what out of it and it probably all stems from the fact that we really oughtn't to have gone down the route of knock for knock and in an ideal world if we started again we wouldn't have this completely combined situation where everybody doesn't really know who's paying for what and it's very clear Clinical service funds and research funds have been so intermeshed for 40 years that trying to disentangle them is a huge job (Head of HEI Research Support Office)

A separate issue that has arisen as a result of the new NIHR funding streams is that of which institution should hold the grant for those NIHR funding streams that can be applied for from either an NHS Trust or a University, for example HTA grants. Trusts, but not Universities, receive additional NIHR money in the form of Flexibility and Sustainability Funding – a similar system to the QR money given to universities who hold large charity grants. This funding is for the Trust to sustain staff in between grants and to allow for pump priming of work to gain more grant awards – so to pay for time to write grants, or, in exceptional circumstances, the money to run pilot projects to gather the data required to write a more robust grant application. This funding stream has led to robust debates between partnerships as to which organisation should be the submitting organisation.

In one city, this tension was referred to by more than one person

Trying to agree NIHR/RC (research council) split that maximises QR and FSF
(Head of HEI Research Support Office)

There has been reluctant acceptance from the HEI that the Trust had to be able to submit the NIHR grants to increase the amount of FSF the Trust receives

Had to accept that the Trusts have a threshold, a certain amount of funding available to them before it was possible to create a strategic fund – very acrimonious discussions with the Trust FDs (Financial Directors).

(University faculty research manager)

Some have decided to use the HEI finance systems for managing grants, but acknowledge that there are real difficulties in marrying up data that suits the reporting needs of both sides. Others have adopted a model whereby they use their own systems to offer a service to the other side, such a service to be provided under a service level agreement. One institution, presented as a joint office, is actually a University Research Support Office providing all research management and administration for the NHS partner under a service level agreement. One joined partnership – which has separate offices for research support in the University and the NHS - is working out the arrangements around offering a grant finance administration service to the NHS. One institution however, had a different idea as to the desirability of such an arrangement;

Well I think that's probably a good thing actually (not to provide services for each other) because I don't think that...I think taking entire responsibility away from somebody for doing something is a dangerous thing, if you see what I mean, I think it's a danger because it's a bit like, well, if it's somebody else's problem then it's somebody else's fault when something goes wrong? (Head of University Research Support Office)

Financial controls, however, were not thought to be a good thing for the health of the relationship:

The finance side of the Trust has seen this (signing off NIHR grants) as an opportunity to use this agreement as a control mechanism, so they've put in lots of stuff about you must do this, before you sign off, you must do that ...and it moves from being a framework agreement, as I say, to being a control mechanism. Now personally I don't think that's in line with partnership working because if partners are to sign up to working together from the start and when you start to put controls in like that it speaks of a lack of trust. What the (Trust) finance have said to me is 'the University is trying to take all our money off us'...There is a lack of trust absolutely. A lack of understanding...the rules are very clear, I can't take £20.00 and go off in the research account and return it as research, hooray, I cannot do that. I actually have rules...my constraints are much more than in the NHS yet they still think I want to take some money off them and that I can accumulate...I'm not allowed to...the University has to account for expenditure. Them's the rules. (Head of HEI faculty Research Support Office)

The different emphasis that funding places of research has a knock on effect to other areas of the research support business:

It's a difficult one because I mean the two halves of the office come from a fundamentally different point of view, anything coming through the University in the grants and contracts team it actually only touches the grants and contracts team if there is additional external funding attached to it. So if it's just... if it's a self funded PhD or it's own account, in inverted commas, the University wouldn't necessarily know whereas obviously anything coming through the Trust needs to be approved, the regulatory steps need to have been shown. (Head of Joint Office)

This head of a joint office is describing the situation where the HEI 'half' of their joint office is not interested in particular types of research – for example student research or research without funding attached. In contrast the NHS 'half' of the office does have to know about all of these types of research because of the national imperatives around knowing about all research taking place on NHS premises or with NHS patients or staff.

5.2.2.2 Regulatory systems

As a result of the commitment to “bureaucracy busting” in Best Research for Best Health, NHS Trusts now have to implement and operate national systems for the approval and set-up of clinical research. These new systems seem to have created another reason why setting up joint offices is not straight forward; there is agreement from both NHS and HEI research support staff that the new national systems imposed on the NHS for managing research have potential for further disruption of close working between the NHS and the HEI Research Support Offices.

There will be a conflict going forward because the Trust processes are going to have to align to national systems that the Universities will not adopt (Head of HEI faculty Research Support Office)

The mandatory adoption of national research approval systems for the NHS means that common systems locally would have to use NHS systems and this would not work for the Universities (Head of NHS Research Support Office)

These quotations were typical of this issue. All of the respondents talked of the difficulty of merging systems, or the whole-scale adoption of existing systems

implemented into both the Trust and the University sides, and have not found ways to do this satisfactorily.

This duplication of systems was felt to be an inevitable consequence of the institutions being separate legal entities.

Clinical researchers operate within a legal and ethical framework that demands high standards. Proving that their research can and will meet those standards can be a lengthy process with numerous different forms to complete for the different agencies involved. The Academy of Medical Sciences has recently reported a consultation exercise about having a single regulator for research. Until this report is accepted and implemented, a researcher wanting to investigate a simple drug trial will need to gain approval from:

- The National Research Ethics Service
- the Medicines and Healthcare Products Regulatory Agency
- the individual NHS Trusts within which they wish to recruit participants
- and usually their own employer

The issue of regulatory requirements for research elicited some strong comments - the respondents were all interviewed within the professional environments and the tone of the interviews, was, on the whole, measured. However, when respondents started to describe the regulatory environment for research, the respondents became much more animated and used stronger descriptive words to illustrate the points they were making.

More and more are being put in the way of research...the global checks have not streamlined the process at all in the way that was originally envisaged. The PI's are switched on enough to see that and several have been very vocal at national meetings about bureaucracy busting (Head of Joint Research Support Office)

Clinical trial regulations are still a huge barrier for researchers. There is a lot of resistance on the part of the investigators to the regulations. (Head of Joint Research Office)

Regulatory hurdles are stifling research (Head of Joint Research Office)

5.2.3 Relationships, history and culture

This section describes the findings around relationships – both personal and institutional - the history between institutions and cultural differences between the NHS and the Universities. Culture was described within these interviews as being about the different experiences and reactions to large scale change programmes, needs and priorities within the institutions and the shifting agenda for clinical and applied health research in England.

The importance of the history of the relationships between the institutions was stressed by some and could be seen as contributing to their current models of partnership for research. One joint office set-up described a long history of close working between the University and the NHS Trust. This participant believed that this contributed to the ability to be able to set up a joint office between the two institutions.

The separate offices provided evidence of the opposite – their poor relationship history was discussed and may have been a part of the reason why they did not have more formal collaborations and partnerships in place. One HEI head of a faculty Research Support Office cited a long history of criticism between the University and the NHS Trust.

Another respondent seemed uncomfortable when asked if they had a strong relationship with their partner NHS Trust

Ah...I'm not sure we have... well I think the answer is yes and no"

and went on to say at a strategy level there is a lack of political will to collaborate

...I know there is not a lot of love lost between our respective chief executives... The relationship between the Trust and the University is a bit like brother and sister – can't live with them, can't live without them...Current CEO (of the Trust) pays lip service to partnership but actually is not interested (Head of HEI Research Support Office)

The same respondent recognised the history of the relationships as being important in terms of how much each partner would be prepared to give and speculates on the NHS view of the University;

It is easier to work together when structures are not so entrenched...tradition mitigates (sic) against cooperation. The long history of not working together leads to a lack of cooperation at strategic levels, whereas newer institutions are clearer that there are benefits to being a teaching Trust and having University input, whereas, I think the NHS sometimes just sees us as a nuisance. (Head of HEI Research Support Office)

In settings with more than one University, it was claimed that the universities had many more problems working together than the NHS (NHS CEO). However, a senior University research manager claimed that it was the competition between the Trusts in their area that had led to the inability to agree a true joint research agenda. (Head of HEI Research Support Office). This was corroborated by the senior manager of a joint office when asked about whether or not more local NHS Trusts would join their research support partnership;

I can see the logic of joining all the trusts together for research, but historically, this Trust didn't have a particularly good relationship with other Trusts in the area. (Head of Joint Research Office)

The sense that personal relationships also acted as barriers to the creation of more collaborative partnerships was illustrated by the NHS research manager of a separate office partnership who said of the will to create a joint research strategy:

It may be a step too far because each Trust has its Chief Exec and they are competitive people and they want the best for their organisation and they want to make their own decisions about that organisation, investments, disinvestments and so, ceding that to the University...I think it is has one hospital and one University in it you might get closer to doing it, but with a number of NHS trusts in it then the idea that one trust would give up,...stop doing something so that the resource could be taken out of that hospital and moved to another hospital to support some growth in another hospital...if you're the hospital that's losing out in that I think it's a step too far... (Head of NHS Research Support Office)

As has been described already, none of the HEI's ran all of their research support services from within their joint offices and all maintained a version of centre research support and devolved faculty/departmental/school research support. Most commonly, the medical school/faculty is responsible for the joint office. This arrangement has meant that within the HEIs there is the potential for duplications and confusions on roles and responsibilities.

The joint research office and the central office have suffered from some confusion – particularly with how to update researchers and there is the potential for duplication between the joint research office and the central research office.
(Head of HEI central Research Support Office)

The NHS has undergone many major service reconfigurations since its inception, so the implementation of a new research strategy did not overwhelm NHS research managers. Change is a given in the NHS and managers at all levels have to become skilled in change management. BRfBH not only implemented change in the NHS, but because of the way it forced partnership working between the NHS and the Universities, change was also forced on the HE sector. This sector has traditionally been much more stable than the NHS (although this is rapidly changing) and some research support staff have found the pace of change challenging

I would just like about maybe three or four months where they stop moving the goalposts – they being the national people. That would give me enough time to think, to get my head around it because whatever we do, there's always somebody else going 'ah yes, but we need this, or we need that ... This constantly changing world wastes a lot of resources and takes time away from the researchers. It is like every week there is something else comes out – as soon as you have an understanding of a system, it changes ... Much clearer picture on the University side because the world is not changing so rapidly. Wearing a Trust hat, you just think, well what are they going to bring out next week? (Head of Joint Research Office)

Most respondents spoke about the difficulties of meeting the needs of perceived different agendas of the Trusts and the HEIs. In describing why an attempt at a joint management post had not worked, one respondent said

There were elements of the joint post that were felt not to have worked as well as they might have and personally I think that's because you can't serve two masters... I think working for two separate corporate and legal entities I think is an extremely difficult thing to do and what you end up doing is, well they've got a problem on one side I'll focus on that, now they have a problem on the other side,

I will focus on that and you never really, - the transparency of the role is not at all clear in that setting (Head of HEI faculty Research Support Office)

Competition between NHS Trusts and between NHS Trusts and HEIs for scarce resources has led to tensions

Competitive funding rounds have introduced a level of competition between the universities and the Trust that wasn't there in the days of Culyer...also the commercial trials going through the Trust rather than the University are causing conflict (Head of HEI Research Support Office)

There is competition between the Trusts in this area. The University is seen as having close links with one Trust so the other Trusts do not trust the University or the main Trust (Head of HEI Research Support Office)

This sense of competition was highlighted by one respondent who was not prepared to discuss what did and did not work well with their joint office (HEI Research Director). When asked if his answers might help others to solve intractable problems he replied

I think even then there is a distinct limit to what I propose to talk about I think these are immensely sensitive issues...and you ask rather fundamental questions about what works and what doesn't and why (HEI Research Director)

Universities teach and do research and NHS Trusts care for patients. Those were the rather simplistic, but recognizable priorities for the two sectors and as expected, this was echoed in the accounts of many of the respondents and used to explain some of the tensions between the HEIs and the NHS Trusts.

Research is a massively core function of the University and will always be a marginal function of the Trust in terms of the proportion of resources devoted. (NHS Research Director)

Research is not a top priority for the Trust. The Trust has other priorities as it is trying to become a foundation Trust. (Head of Joint Office)

...we need to understand the fact that research is a minor activity to an NHS Trust. They're about patching people up and putting them back on the streets. (Head of HEI Research Support Office)

Not only is the overall emphasis on research seen as different between the two sectors, but also the approach and priorities for research itself. The HE sector were interested in funded research, but not unfunded or student work which was seemingly not regulated at a central level. In contrast, the NHS has to, as a result of the standards set in the Research Governance Framework, keep a record of all research going on within its hospitals, so unfunded and student work is recorded like any other research endeavour. In addition, the two sectors were described, by each other, as concentrating on different managerial aspects of research, with HEI research support managers describing the NHS side as being good at governance, delivery of trials and clinical risk and the NHS research support managers expecting the HEI Research Support Offices to concentrate on the science and funding of the research.

Respondents from both sectors, however, did agree that at present, the HEIs take a more strategic approach to research and research priority setting, whereas many respondents spoke of the lack of strategic vision for research in the Trusts.

There is no joint executive function for research. No strategic culture in the Trust. The Trust finance director sees research as a drain and a difficult accounting problem... (Head of Joint Research Support Office)

Clinical research is complex not only in accounting terms and this complexity was commented on by two University research managers with regard to the amount of resources that go in to supporting clinical research compared to the amount of income it brings to the Universities.

Clinical research is extremely complex and soaks up much resource – far more than it brings in in indirects. (Head of HEI Research Support Office)

...conflict in that the research within the medical faculty is highly complex, but not high volume – so the resourcing has started to focus on where the complexities are and not where the volume is. (Head of HEI Central Research Support Office)

This simple world, where HEIs decide the research priorities and employ the researchers and NHS Trusts provide the test-beds for their work is changing. The HEI's and their partner NHS Trusts are moving ever closer together in order to deliver care teaching and research of the highest quality. The NIHR and some of the

MRC funding streams explicitly fund translational work of benefit to patients. The NIHR stipulates that the work should have an impact on patient care within five years. So, the agendas for research active Trusts and their partner universities are moving closer together. This was recognised by most of the respondents;

The agendas are getting close as the Trust begins to understand how research feeds into patient care...the NHS agenda now also focuses on getting the money in and developing systems to ensure that the data collected provides the evidence for additional funding from the Networks (Head of Joint Research Support Office)

Change needs to happen in how Trusts view their research. They have got to be able to publicly report metrics such as recruitment rates. They need to demonstrate the impact of research and the return on investment...They need to make research their business. (Head of NHS Research Support Office)

The aligning of clinical services with academic services is key to creating a whole that is greater than the sum of its parts..., then you start to take an interest in what comes across your borders in a different way and you also taken an interest in how well that interaction operates and the relationship on which it's based operates. (NHS CEO)

The NHS Trusts and the Universities do have interdependent needs and agendas. The Universities rely on the NHS to provide the patients and health resources required for the clinical academics and also on NHS Consultants to provide teaching for students. The NHS relies on the clinical academics to provide the evidence base on which to base service decisions. The implementation of *Best Research for Best Health* has brought those agendas closer together. The Department of Health has become more of an expert customer with the explicit emphasis placed on the research funded through the NIHR being of patient benefit sooner than had previously been the case. The squeeze on funding from other sources for clinical academics means that these NIHR funding streams are very attractive for the clinical academics and their institutions. So, the emphasis on an evidence base for NHS services and the financial incentive provided by the restructuring of government funding for health research have combined in a way to force the NHS and the academic sector to move much closer together. As one CEO of an NHS Trust said:

Health services are part of a complex system where the borders are open...One of the main cross-border activities is between the teaching hospital and the University...So the idea that we are something around which there are these

large intersection of practical walls erected I think is something you have to start dismantling ...You can't deliver quality in tertiary services or for that matter quality end services ultimately without a strong academic backdrop. The best providers of services like to interface with the best thinkers about services and you attract the best so you get positive reinforcing cycle. (CEO NHS Trust)

5.3 Drivers for Research Support Office structure

This section described the six drivers for the types of Research Support Offices described by interview participants. The six drivers have been titled as; senior level desire and vision; director level implementation; capacity and opportunity; history of successful partnership working; trust; and policy drivers

5.3.1 Senior executive level (VC and CEO) shared desire and vision for partnership.

This senior level of support for the initiative to work in partnership was described as an essential driver for delivering partnership working. The interviewees who worked in integrated or collaborative offices, all described that the desire to achieve that level of partnership working was driven from the top of both institutions in the partnership. The Vice –Chancellor and the Trust Chief Executive(s) wanted both to work in partnership together to maximize their potential for research income impacts and outputs but also wished explicitly to form a joint office to help facilitate this. In contrast, one of the interviewees who worked in a separate office described how the CEO of the Trust did not seem to want to work in partnership and was an active block to working together. By way of contrast, one NHS CEO was very clear about the absolute requirement for the NHS and HEIs to work together.

I mean if you're a chief executive of a teaching hospital, sorry teaching hospital is a misnomer, let's call them a University hospital, then you should be mindful of having a broader role which goes back to this question of working across the borders. A University hospital has a remit beyond that of simply being a very, very big hospital, it's got a responsibility not just to provide but to learn, to educate, to reinforce that by more learning, which in turn converts into more education, building the partners, building the possibilities and realising if you're doing that you're operating a global environment. So you can't do that in a half-arsed, provincial teaching hospital way (CEO NHS Trust)

The political will was very necessary for the establishment of partnership working.

5.3.2 Director level implementation of vision

The partnerships that worked explicitly together in joint offices all had a research director capable of creating the right environment in which to implement the vision of joint working. It was apparent in some cases that it was the sheer force of individuals that enabled the establishment of partnership working.

So, we had this mad keen director then, like tigger on speed he was – he just HAD to do this because he said he was going to, and I was there, and I like, well I had worked on both sides and knew all the people.

5.3.3 Capacity and opportunity

It was clear that partnership working between the NHS and the HEIs was very influenced by the passion and commitment of senior teams within the institutions. One NHS Trust CEO, working in a Trust which did not have a good relationship with its local HEIs described how the entire executive team had to move on and be replaced by people with more sympathy towards the explicit academic agenda being created by the CEO.

I'm the longest serving executive director ...

So you've recruited your own team now?

Yes and one of them's a clinical academic anyway, one of them's got a PhD ...and is supporting me on the academic agenda, the chief operating officer, very highly educated and he gets it, some of the other corporate directors are very excited about getting into this territory and so what we've done is we've created a level of ambition that wasn't there before and that's bound the exec directors very much together. (CEO NHS Trust)

One Head of a Joint office described how the drive towards a joint office really took off once a PVC who had been against the idea resigned and moved to a different HEI. A Research Director was very clear that having all the right people in the right place at the same time was absolutely pivotal to the achievement of their ambitions:

he (The VC) felt that there would be considerable advantages in having a more integrated University ...and that led to really quite a considerable amount of political action at high levels of government ...and the upshot of that was the resignation of two chief executives, the merger of two trusts...It was pushed by

(The Vice Chancellor) and he was the prime mover. I think if he hadn't been Vice Chancellor at that time I don't think another would necessarily either have had the drive or the vision, or the political links to have achieved it and as I say it helped to have (person) at that particular moment in that particular boat. (all the right people), in all the key positions saying this should happen and it's like an alignment of the planets something which just happens now and again by chance and that was the chance and (the Vice Chancellor) took it.... (Director of Research)

5.3.4 History of successful partnership working

The creation of partnership working does not happen easily. One of the more established joint offices described how their first move towards partnership working was to firstly co-locate and then slowly bring the two sides together.

So, as I said before, we put all the trust staff and the University staff in one place and let them just get to know each other for a bit and then, when that wasn't fast enough for (Director of Research), we asked them to start working across the two – you know, job shadowing and that. Now they can all cover for each other...putting them together wasn't difficult – that took about four months to organize, but it was years before they really understood each other (Head of Joint Office)

Within this office, staff were co-located for seven years, following a five year discussion period before true integration occurred. One of the newer partnerships is doing the same thing – co-locating staff without changing job descriptions or line management and allowing the operational partnerships to develop over time.

co-location with the 'two halves' together and slowly beginning to learn each others trades; so we've done quite a lot in terms of members of the team shadowing each other just to understand fundamentally where people are coming from and even things just about the process...(Head of Joint Office)

Where the history between the two partners was long and strong already, the establishment of joint offices and partnership working was much easier and felt to be a logical step and didn't require such a long period of settling.

The HEI and the Trust have always had a very, very close relationship anyway... a long term historical relationship in terms of the research, clinical work and education and I guess this was just a further step in cementing that really... Well yeah I mean there's always been a symbiosis between the organisations ...They've got no contracts with the Trust. So there's always been that kind of togetherness and it wasn't anything very new in that sense but I think it was clearly

recognised from the management side of things that it made sense to bring those together. (Head of Joint Office)

An established joint office described how the poor relationships between the NHS side and the HEI slowed down efforts to establish a joint office.

(The relationship between the HEI and the NHS was described as)

...scrappy, not good and you'll find this when you talk to a lot of other places who are not quite as joined as they might think they are. The general beef was that universities were opening up all the grants and keeping all the money. So things like service support costs and everything else weren't being paid to the Trusts, that was the biggest beef, plus there was no profile of the Trust, they were deemed to be teaching Trusts ... Well it was sort of... believe it or not it was an idea that was on our minds in 1996 with the objective of sorting out the finances, trying to get a bit closer... to medical support relationships that were absolutely awful and starting to develop some transparency between the two. They were the principle drivers. You can imagine from 1996 to 2004 is quite a while before we actually got our act together although we started planning in 2003 when we were really let's do it and when the decision was made we created the joint office and got all the systems and new governance to join the two (Head of Joint Office)

5.3.5 Trust

The issue of trust between the institutions was raised by most of the respondents. Either in terms of how there were high levels of trust – and this was common to the respondents who described their offices as joint Research Support Offices - or lesser levels of trust, and this was described by some respondents as one of the key reasons that joint working was less established. Similarly important as the need to have a history of successful joint working before a true joint office could be established, one of the heads of a joint office made reference to the need to establish high levels of trust between the two partners before real joint working was possible

The two sides didn't trust each other. The general beef, as I have said before is that the HEIs were opening up all the grants and keeping all the money and the NHS became a sort of hotel for them to swan in and out of to do their research and not pay their way – this led to the perception, or maybe it was real, I don't know, that you couldn't trust anyone doing research. Anyway, then the two sides started talking, and, well there was no profile for research in the Trust, so they started discussing a joint office in 1996. They kept talking and not doing, but maybe that was what they needed to do, I don't know, and then the real planning started in 2003 and the office was realized in 2006. (Head of Joint Research Support Office)

A head of a different joint office had a different journey to the establishment of a joint office and described how the levels of trust had always been good between the two sides, that the symbiosis was recognized by both sides and that it just made sense to work together. On the other hand, the head of an NHS Research Support Office described how the lack of similarity between the two organisations in terms of their different priorities, different agendas and levels of understanding and commitment to the research agenda led to inherent mistrust between the two types of institution. This respondent also offered a compelling picture of why that was and believed that game playing by senior academics probably impacted on behaviours higher up in the organizations.

There is a complexity of relationships at play between several NHS Trusts and HEIs. There is not much strategic planning to join priorities across the institutions at a senior level. I think there might be an inherent mistrust between the two types of organizations. I mean I couldn't say for sure but...and I know that in the faculty there's been a lot to try and break down those barriers, but some of it I think probably comes from game playing by senior consultants, academic staff, do you know what I mean? - playing the organizations off against each other and so it probably stems from that really and it kind of leeches up I think. (Head of HEI Research Support Office)

Financial issues were also raised around the issue of mistrust between the two types of institution. This also related to the issue of clinical academics playing the institutions off against each other.

...you know, they (clinical academics) will play us you know, they will put their grants and money where it best suits them...there is great unfairness in the way that commercial trials get done in the NHS and the HEI does not receive any indirects on that and that is not right and I think inevitably contributes to a lack of trust between us. (Head of HEI Research Support Office)

A comment on the structural issues that may impact on the levels of trust between institutions was raised by an HEI faculty research support manager as they commented:

...control mechanisms between us lead to a lack of trust – if partners have to sign up to working together from the start and it is all legal and you start putting in control mechanisms, whereas, well, before you sort of worked together for the common good, well, now, well mechanisms like that, they speak of a lack of trust... (HEI faculty head of research support)

The respondent was describing how the voluntary, uncontrolled cordial working relations working together pre- control mechanisms had been disturbed by the need for formal agreements and statements of control.

5.3.6 Which policies drove the creation of joint offices?

The first policy driver described by respondents to assist the creation of joint working practices was the need for NHS Trusts, at the end of the 1990's, to report their levels of research activity to the Department of Health. This was as a result of the report from Professor Anthony Culyer describing the need for explicit recognition of research activity in NHS Trusts (Culyer 1994). This report led to what has become known in NHS Trust and the 'Culyer Declaration'. The Culyer declaration required NHS Trusts to explicitly identify the levels of research activity they were involved in. At that time, very few NHS Trust had an identified Research Support Office. This led to some HEIs and some NHS Trusts working together to create the Culyer Declaration. Two of the self-described joint offices heads identified the Culyer declaration as directly responsible for the creation of joint working.

...working closely together was driven by a visionary R&D Director at the time of the Culyer reforms...there was a strong desire to continue the world class research and they all saw the advantages in symbiosis...HEI support was brought into the Trust to establish the R&D office at the time of the Culyer declaration.
(Head of Joint Office)

By way of contrast, one of the NHS Trust Heads of Research support described the HEI approach at the time of the Culyer declaration as 'predatory' and said that the HEI just wanted to take over the research agenda and dictate to the Trust what they should do. The more recent major policy driver described by respondents for the HEIs and the NHS was the 2006 Research Strategy *Best Research for Best Health*. This has also been described by the respondents as a clear policy driver for joint working. This time, rather than the need for capturing levels of activity accurately and reporting them, the main driver has been around the new funding streams and the need to maximize grant income for the partners. One respondent described how BRfBH became one of the final levers needed to assist the creation of a joint office.

The idea of a joint office had been described for ages – initially around the idea of co-location as the Trust wanted to be able to tap into the HEI expertise. The

previous PVC was very keen and had been talking to the CEO for a very long time. Then the Trust R&D staff left due to woeful under-resourcing and Best Research for Best Health came along and the Trust needed support, so we were co-located.(Head of Joint Office)

A second respondent remarked that they were applying for a Biomedical Research Centre, which is part of the infrastructure support offered by the new funding streams and that they had to be seen externally as cohesive, so they also created co-location for research support staff.

In addition to BRfBH and the new funding streams, a different more recent policy driver for the creation of joint offices was the policy of mandatory inspections by the licensing authority of institutions undertaking clinical research with investigational medicinal products (drugs). In one partnership, the respondent described how the NHS partner had had a very poor inspection result from a governance systems inspection from the MHRA and did not know how to respond. In addition, they wished to take advantage of the new funding streams. As the NHS partner was also trying to achieve foundation status, they did not have the time to concentrate on the research agenda as well, so they requested support from their closest HEI and that lead to the creation of a join office.

However, not all of the policy initiatives were seen as conducive towards joint working. One Head of an HEI Research Support Office described how the initiatives around Foundation trust status has worked, in their area, against partnership working.

The foundation status has moved the Trust away a bit from being public sector. Before they became a foundation trust, there was more of a sense of well, we are actually all in the public sector, we are all in this together and we can work together. We were all part of the same thing in a way...they have moved much further away from us now and I think they just see us as just a bit of a nuisance now really...(Head of HEI Research Support Office)

5.4 Section Three: The typology

This section describes how the findings from the survey and the interviews were combined to explore whether or not a typology of Research Support Offices could be identified.

A central chart was drawn up using elements from both the survey and from the interviews. As this was refined, it was possible to identify three typologies of Research Support Offices. These are detailed in table 5.2 with the main features displayed.

Table 5.2 Typology of Research Support Offices: Partnerships between the NHS and the HEI's

	JOINT	COLLABORATIVE	SEPARATE
LEADERSHIP	Single senior administrative leader with responsibility and accountability to both partners	Single senior administrative leader with responsibility and accountability to both partners	Each partner has its own administrative leader – levels of seniority vary
LOCATION	Co-located	Co-located	Each partner provides space for their research management and administration function
RM&A FUNCTIONS	All NHS RM&A functions and all medical faculty RM&A functions	Most NHS RM&A functions and most medical faculty RM&A functions	Each separate office provides RM&A functions for own institution only
EMPLOYER	Can be employed by either side	Employer dependent on job role and responsibilities	Institution specific
INTER-AGENCY WORKING	Staff provide support for both sides of the partnership	Staff provide support to one side of the partnership or the other	Institution specific
NUMBER OF PARTNERS	One HEI and one NHS Trust	One HEI and One NHS Trust	One or more HEIs and one or more NHS Trusts

As can be seen in the first row, single senior administrative leadership was common to both the joint and the collaborative offices. In contrast, this did not exist in the separate offices.

So, I head up the office and all of the staff eventually come up to me...I report up to [name of post] on the medical school and on the Trust side I report to the

Medical Director...we have dual reporting and dual accountability. (Head of Joint Research Support Office.)

The second row shows details of the location of each of the different types of office. The joint offices were co-located as were the collaborative offices. These two types of partnerships housed their research management and administrative staff in a single location. In contrast, the separate offices did not share office space. One of the separate offices with aspirations towards more formalized joint working is planning on housing two University employed research managers with the NHS Trust research management staff as a first move towards collaborative working.

We are in the process of setting up a joint office on a small scale – i.e. two members of staff from University to be based at least half-time in the Trust R&D office (free text answer to question 12 on survey)

The offices also varied in which research management and administration tasks they were responsible for delivering for the partners. The joint offices provided all of the research support needed for the NHS partner and provided all of the functions needed for the HEI medical faculty. None of the joint offices provided all research support services for the wider HEI – in all cases they were limited to the medical faculty. All of the joint offices were reliant on a central HEI Research Support Office to provide a varying number of research support functions – mainly high level research strategy and complex funding negotiations. The collaborative offices provided most of the research support needed for the NHS partner. The functions they did not provide to the NHS partner varied from governance monitoring of clinical trials to granting approvals. Another of the distinctions between the collaborative offices and the joint offices was that the collaborative offices were much more reliant on a central HEI function for day-to-day research support functions such as grants and contracts, or budget management. The separate offices provided research support services to their own institutions – again with the medical faculty research support function reliant on a central HEI research support function.

The three types of office also varied on who employed the staff working within them and the relative importance that was placed on this by the Heads of the Offices. The joint offices did not set any criteria behind which staff were employed by which institutions and instead allowed the member of staff to decide which institution best

fit with them. In contrast, the collaborative offices arranged employment by which institution the member of staff was nominally going to work for.

In terms of how the two obviously halves of the office, if I can say that, how they still report up through the statutory routes into the two organizations...the joint executive (for research) up to the Trust Board and up through the faculty into the University executive board. So that's kind of the split...we have no jointly appointed staff but my post is the only one that is jointly funded...everyone else is solely employed by one organization. So the Trust R&D are employed by the Trust and the University grants and contracts staff through the University (Head of Joint (collaborative) Office)

As would be expected, the separate offices employed their own staff to work for their own institutions. Related to employment is which of the partners the staff work for within the offices. Within the joint offices, staff were expected to perform their function across both sides of the partnership, so, for example, finance staff are proficient in both NHS and HEI finance systems. The collaborative offices, in contrast, employed staff to work specifically for one or other of the partners, although there could be some overlap – most commonly with the permissions given to start the research and the governance monitoring once the research was underway.

The separate offices worked for their employing organization only, although there are one or two examples where a specific function is provided from one partner to the other under a service level agreement – this was mostly for governance monitoring with the NHS side providing this service for the HEI side.

The number of partners was also different between the three typologies. The joint offices were all one NHS Trust and one HEI partner. The collaborative offices were all between one NHS Trust and one HEI partner. In contrast, the model for the separate offices was for more than one of at least one of the partners, so, either one NHS Trust and more than one university partner, or more than one NHS Trust and one university.

5.5 Summary

In summary, the findings in this chapter show that it was possible to identify three different models of Research Support Office and to locate each of the offices that these participants worked within into one of the models only. The models were joint,

collaborative and separate. The joint and the collaborative offices had much in common, but the key difference was that the joint offices were much more intertwined when it came to delivering functions for both sides of the partnership and with regard to the employment of staff. The collaborative offices, on the other hand, linked the employment and duties of the staff to one or other of the partners – and would therefore be much simpler to disentangle should the need arise. One of the differences between the joint and collaborative and the separate offices was in the number of partners. The joint and collaborative partnerships were between one HEI and one NHS Trust – even though the HEIs had named more than one NHS Trust as associated Trusts in the survey. In the places where separate offices were still the norm, those locations were home to either more than one HEI and more than one NHS Trust, or one HEI and more than one NHS Trust.

Some of the drivers to establish the joint offices were also described in this chapter. Leadership vision was found to be a common theme across the joint offices as was having the capacity and opportunity to meet that vision. The partners who formed joint offices all also did so in relation to strong policy drivers – either the Culyer declarations in the 1990's, or the more recent government research strategy *Best Research for Best Health*.

It is clear that trying to join systems for research management across the NHS and the Universities has not happened. Barriers to effective working have not yet been overcome. In particular, finance systems cause much misunderstanding and mistrust. Researchers are still navigating complex regulatory environments – despite the joint offices - so the duplication that exists for clinical academics between the HEI and the NHS joint offices did not appear in the accounts of these participants to be important as the regulatory environment within which clinical and applied health research is conducted.

Chapter Six: Discussion of findings and conclusion.

6.1 Introduction

The main finding of this work was that all Research Support Offices in the NHS or the Higher Education Sector are structured and function differently. Consequently there are few common standards, systems or processes in place to support research and researchers. This lack of commonality within Higher Education Institutions and NHS Trusts' Research Support Offices described within this work contributes to the complexity of the environment within which clinical and applied health researchers operate. This work supports previous findings that the regulatory environment for clinical and applied health research is complex and challenging for researchers to navigate (NIHR 2009).

This work found that some NHS and University Research Support Offices do work in partnership to provide research support albeit utilising different models of partnership working. The barriers to partnership working identified in previous literature regarding NHS partnership working in England were confirmed within this work. Similarly, factors that contribute to the success of the partnerships were also confirmed within this work. In common with previous findings, the drivers to set up these partnerships for joint offices were driven by organisational, political and economic reasons, with the focus on outcomes for the end users – in this case the researchers - largely absent. This is reminiscent of the work by Dickinson & Glasby (2010) who demonstrated that partnerships can be set up more to meet the needs of the institutions than the end users.

The questions asked in this thesis concerned the structure and function of Research Support Offices in English NHS Trusts and Universities. The motivations for studying these areas were the renewed drivers for joint working between the two sectors posed by *Best Research for Best Health* (DH 2006). The history of research management and administrative working in universities and NHS Trusts diverged at the time of the implementation of the Research Governance Framework and the EU Directive on Clinical Trials, with the NHS becoming increasingly concerned with

issues of patient safety and reputation, apparently leading to an over-emphasis on the governance rather than the support of research(DH 2006).

The advent of *Best Research for Best Health*(DH 2006, heralding the changing landscape for the funding arrangements of clinical and applied health research in the NHS, meant that NHS Trust Research Support Offices had to (re) learn skills around grant support and management in addition to the responsibilities around governance, delivering clinical trials and patient safety. The options open to NHS Trusts were to either up-skill their own departments, ignore the new needs, or partner with another Research Support Office – usually from the higher education sector - to access those skills.

The literature to date has not explored models of partnership working between the NHS and University Research Support Offices. Therefore, this study set out to answer questions based around mapping the current models of joint working between the NHS and the HEI Research Support Offices and then to seek to understand why they had built the structures they had built.

6.2 Research aims and objectives

The aims of this study were to explore the structure of Research Support Offices between all English HEIs with medical schools and their associated NHS Trusts and to identify factors that contribute to the establishment of the chosen model of partnership working.

The objectives of the study were to:

- Map current research management arrangements nationally within England in HEIs with medical schools and their associated NHS Trusts
- Identify key characteristics of different models of research management partnerships and factors that contribute to different models of partnerships in research management and support

These aims and objectives were met by mapping the current research management arrangements in place at the time of this work by collecting data using an online

survey and the key characteristics and drivers of the different models were given depth by semi-structured interviews.

6.3 Discussion of the findings

During analysis of the interviews and the survey the importance of the following became apparent: the differing structures & functions of Research Support Offices; the systems & processes used to manage research and the existing relationships and culture of the NHS and Universities in England. These findings from the survey and the interviews will now be grouped together into three themes to be discussed.

6.3.1 Fragmentation in support.

There were no functions identified, either through the survey or subsequent interviews, that were provided in every Research Support Office. Results from the survey questions about function and responsibilities and findings from the interview analyses found evidence of a range of services provided from Research Support Offices. This confirms work from previous commentators (Carter & Langley 2009, Shelley 2010) who demonstrated the range and variation of support provided by research managers and administrators with some research managers and administrators supporting projects and others being responsible for formulation of institutional strategy. This lack of homogeneity in the Research Support Offices contributes to the difficulty researchers have navigating the regulatory environment for research (Howarth & Kneafsey (2005).

Findings from the current study point to a difference in emphasis between the NHS Research Support Offices and the HEI Research Support Offices, with NHS offices having to be interested in all research that goes on – mainly with an eye to the impact on patient safety and cost to the NHS - and HEI Research Support Offices focusing on funded work and issues of finances and contracts. The descriptions of staff roles for staff working for the HEI partners also focused on University grants and contracts and for staff working for the NHS partners focused NHS governance and delivery of clinical trials and impact on patient care.

The evidence from this thesis about differences in approach to sponsorship is also interesting. Respondents varied in how they chose to answer the question about sponsor responsibilities. This could either have been a function of how the question was phrased and the fact that it did not force a choice on respondents, or it may illustrate the complexity surrounding the concept of being a sponsor for clinical research. There are definitions written about what a sponsor is (Research Governance Framework 2002, Medicines for Human Use (Clinical Trials) ST 103 Regulations, Crown 2004), but nothing describing what it means in practice for the institutions who choose to undertake this responsibility. This may be one of the reasons for the barriers identified for researchers in navigating the increasingly complex regulations for clinical and applied health research in England (Barriers workshop 2010, AMS review 2011). If research managers and administrators cannot agree on best practice for such a core element of business, then it is not surprising that researchers find it impossible to know where to go for support and advice with the different aspects of their research. Support for researchers on navigating this complex environment varied from the University Research Support Offices as evidenced by the responses to the question on function, with few providing support to researchers on applying for NHS research approvals – despite this being an area identified as complex and bureaucratic (AMS review 2011, DH 2006, NIHR 2009).

The structure of Research Support Offices also varied considerably; approximately half the HEI Research Support Offices provided research management and administration to their institutions from a central office, and half from a central office combined with research support provided within faculties. The responses to this question in the survey had to be re-coded based on the free-text answers given to clarify the division between central and devolved/local research support. This lack of clarity around the division of support amongst the research management community could indicate that the research managers themselves do not hold a clear 'map' of research support available even within their own institutions, therefore it is unsurprising that researchers find it impossible to navigate the governance requirements around research (Howarth & Kneafsey 2005).

6.3.2 Barriers to partnership working

Respondents spoke of the importance of trust to a partnership and how the lack of it impacted adversely on partnership working. This is in line with previous literature on the subject (Rummery 2002) and again, like previous literature emphasises a lack of trust as a reason for relationship failure, rather than the presence of trust leading to better relationships.

Findings show that the offices that have joined together to deliver research services support have had little success in joining the necessary systems. So, for example, it was not possible to share information about people or grants between the partners as the main institutions did not use common human resources or budget management systems. This inability to merge systems has been identified by Holtom (2001) and Walshe *et al.* (2007) as one of the key barriers to partnership working.

There has been more success in integrating governance systems – most notably around the monitoring and governance of clinical trials. However, even when these systems work together, both sides of the partnership, as separate legal entities need to be sure that their liabilities are covered off. The new AHSC models may change this, but they haven't done so yet. The joining of offices has not had an impact on the national perception of the bureaucracy surrounding clinical research in the UK as evidenced by the recent AMS review (2011) which states that the average time to set up a multi-centre trial from agreement of funding to recruitment of first patient in the UK is 621 days.

Holtom describes other obstacles to partnership working and these can be used to illustrate some of the difficulties facing the joining of NHS Trust and University Research Support Offices (Holtom 2001). Given the conclusions from Walshe *et al.* (2007), that these obstacles alone are enough to prevent partnership working, it is important to consider them here.

The survey demonstrated that the Universities interact with more than one Trust. As shown in the results from the survey, one respondent chose not to name a 'main NHS partner'. This may be because the different partners may have competing agendas. It is not uncommon for a clinical academic to provide clinical services (and thus have

access to) more than one Trust or health care provider. In this way, competition between health providers may emerge, with the clinical academic tempted to play one off against the other in order to secure the best setting for their research. This lack of clear boundaries was identified by Holtom (2001) as a structural issue and suggested that inability to tackle these types of issues can lead to poor collaborative working.

NHS Trusts report to different formal governance structures such as the Care Quality Commission (Department of Health 2004) and work to the Research Governance Framework for Health and Social Care (DH 2002, updated 2005). These standards have specific information and process requirements that can be inconvenient to researchers not used to operating in this way. Findings from the interviews demonstrated that not all University Research Support Offices provided guidance on how to work with NHS Trust management to comply with these frameworks. In addition, the NHS Trusts are obliged to use national IT systems to approve and monitor research. This is not yet an obligation, nor a possibility for Universities. This was identified by respondents as a potential issue and illustrates a procedural barrier to partnership working as identified by Holtom (2001).

One of the issues spoken about most by participants in this work was that of the problems to do with managing research finances. Simple barriers like the difference in financial accounting years (NHS runs April to March and HEI's run August to July) may mean that grant funding does not run as smoothly as it could and this was demonstrated through findings from the interviews. These differences in financial years would also lead to pressures and reporting cycles differing between the two partners. In terms of Holtom's barriers (2001), this procedural barrier is termed one of differing cycles. Research managers did not understand the different funding flows in the partner institutions and this led to some frustrations and delays between partners. The new funding streams within the NHS mean there is no 'Culyer' money (Culyer 1994) for service support costs for clinical academics to draw on and clinical academics are going to have to learn to quantify such costs accurately in order to claim them back in the new systems. The results of the survey showed that less than half (45%) of University Research Support Offices provided assistance and advice to clinical and applied health researchers on how to identify and cost these elements of

their research. This finding did not relate to whether or not the HEI worked in partnership with their NHS Trust – four did and five did not. This finding is of concern as it would imply that one of the benefits of joint working – sharing of best practice and learning from each other (Glendinning 2002), is not being maximally utilised within joint offices. Other differences in procedural and operational systems were seen when participants spoke about the need for the NHS to use nationally mandated systems for research approval and monitoring – systems that at the time of this work, University research managers had no desire (or ability) to adopt.

There appear to be fundamental differences in the way the different research management cultures operate. For example at an Association for Research Managers and Administrators (ARMA) conference (Cardiff June 2007), Carter, as chair of the conference, spoke passionately about the importance of dissemination of research as a mechanism by which to change the *way people think*, yet within the NHS, one of the main drivers for dissemination is to challenge and change the *way people behave*. It may be that this tension does no more than summarise the dichotomy between basic and applied research, but it is a tension that must not be ignored. Although Cooksey (2006) and *Best Research for Best Health* (DH 2006) both acknowledge the error of prioritising basic research over applied, the reality is that those beliefs are deeply held and will not be changed quickly. However, funding streams and government policies are beginning to turn the tide towards applied research (Cooksey 2006, BIS 2011).

The final barrier to partnership working to be discussed here is the difficulty in merging different cultures (Hudson 1999). In simple terms, participants described the culture of the NHS as being one around delivering care for patients and for the Universities as being around teaching and research. The inevitable differences in focus means that the cultures in the two types of organisations will be different. However, this simplistic summary does not explain the differences between the Research Support Offices in the NHS and the Research Support Offices in the universities. This is possibly better explained by the different pressures on the different offices as described in section 6.4.i on fragmentation of support.

6.3.3 Facilitators of partnership working

Several respondents spoke of how having the right leaders setting the agenda for joint working had facilitated the building of joint structures. This supports previous research findings that strong and charismatic leadership is important to achieving the aims of partnership working. (Fear and Bartlett 2003, Cooksey 2006). One of the participants spoke of having a director who was 'like tigger', another respondent spoke of the importance of both the Vice Chancellor and the CEO of the Trust – the two executive leaders of the institutions – sharing the same vision and desire for partnership working. One of the important functions of those leaders was to set a vision and agree what it was going to deliver. The participants from joint offices that had been established in the late 1990's spoke of how the vision was of continued symbiotic working and that they wanted to establish themselves at the forefront of bio-medical research. This agreement around the visions for the partnership and what it was intended to deliver was stated to be important by Dickinson and Glasby (2010) and Balloch and Taylor (2001).

As an essential precursor to partnership working, respondents also spoke of the importance of having a successful history of partnership-working. Again, this confirms previous findings in the literature (Callaghan *et al.* 2000) that having that history of a successful relationship can be a predictor of the success of other joint ventures. There is evidence from these respondents that those partnerships with a successful history, or the patience to build that history, had more success in building joint offices. From this study, in one joint office there had been a history of poor collaborative working. The partnership decided to co-locate staff as a first option and then, five years later, began the work to build a joint function. Two of the newer joint offices are following this strategy. Of interest, two of the separate offices spoke of having tried to work together and failing in the past, so their history of unsuccessfully working together in the past may still be impacting on decisions being taken about current and future working practices.

Glendinning (2002) describes how voluntarism is important to effective partnership working. The evidence from this work to support this is that one respondent felt that when voluntary working together was removed and replaced by control measure to

mandate partnership working, that the partnership working became less effective. Where the partners had committed to sharing resources, either in terms of staff salaries, or by sharing estate, the partnerships led to joint working and co-location of staff. This had been found in the literature previously with Hudson (1999) and Fear & Bartlett (2003), recommending that a commitment to sharing resources – even if the partners cannot commit equally- is a predictor of successful partnership working. In contrast, two respondents, one from a University and one from its associated NHS Trust both spoke of a failed initiative to share a research manager – partly because the post was funded and housed by one of the partners only.

6.4 The emerging typology of Research Support Offices

The typology to emerge from this work supported three models of Research Support Office. The first was a joint office which supplied research management and administration support for clinical and applied health research for the University partner and all research management and administration support for the NHS partner. These offices were co-located and had a single senior administrative head. The partnership was formed by combining the Research managers and administrators from one HEI and one NHS Trust. The structure of this model is closely related to the ‘virtual organisation’ model proposed by the Audit Commission (1998) as the Research Support Office could be said to assume an identity outside of either of the two institutions, but is not a legal entity in its own right. Where this model differs from the Audit Commission model was in who employed staff. In the Audit commission model, staff were commonly all employed by one of the partners and provided support to both partners. In this model, staff could be employed by either partner within the same office and provided services to both institutions in the partnership. The joint offices also mirror the model of partnership working proposed by Glendinning (2002) in that the partnership has two or more organisations; in this case one NHS and one University that together identify, acknowledge and act to secure one or more common objectives, interests or areas of interdependence. In this example, common aims were to support clinical and applied health research in terms of adhering to policies and securing funding in order to improve patient care; but where the autonomy and separate accountability arrangements of the partner organisations are in principle retained. As discovered through the interviews, none of

the joint (or collaborative) offices had managed to join systems and processes and all have dual reporting responsibilities to the NHS and the University partners.

The second model within this typology was that of collaborative offices – these offices had much in common with the joint offices described above. They were also co-located and had a single senior administrative head. The crucial difference however, was that the staff in these offices were employed by one or other of the partners and provided services mainly to that partner. These collaborations could also be larger than just one HEI and one NHS Trust. This model seems to map to the Dickinson and Glasby (2010) model of partnership working, relating most closely to the pragmatist arm of that model of working – that is that partnership is seen as a good thing, the real drivers are left unstated and the organisational and political reasons for joint working are seen as more important than the end user. This may explain why the employment of the staff in these offices is related to who they provide services for – the imperative of partnership working has been achieved by co-location and single leadership, but each partner would find it reasonably easy to disentangle their staff should they need to do so, or should organisational or political drivers change.

The third model identified through the work described in this thesis is not identified within the partnership literature, comprising as it does, separate offices providing services only to the institution employing the staff. The joint and collaborative offices were partnerships between one HEI and one NHS Trust despite some of the HEIs having named more than one NHS Trust as associated Trusts in the survey. It may be that the Research Support Offices in the HEIs and the NHS where there were no obvious pairings, were unable to navigate the additional complexity associated with setting up a joint function between more than two partners (Audit Commission 1998).

6.5 Reflections, limitations and future research

This section will reflect on the role of the researcher in this work, with particular regard to researching with peers. Then the limitations – some informed by the role of the researcher will be discussed. Finally, this section will suggest areas for future research in this area.

6.5.1 Reflections

The survey and interviews in this work were conducted by a senior NHS research manager – known to some of the respondents. Where the researcher was not known personally to the participants, then the practice-based supervisor probably was. This provided advantages and also posed some particular challenges for this research. These issues are documented within the literature with Chew-Graham *et al.* (2002), acknowledging that, whilst researching on professional peers may allow for easier access to the participants, it also probably influences the content of the data and the direction that the interviews may take. Other issues identified with researching one's peers are discussed by Coar and Sim (2006). Their study, eliciting from informants their views on being interviewed by fellow health professionals, described the following findings: many informants viewed the interview as a test of their professional competence; the interviewer was seen as an authoritative source and some respondents felt professionally vulnerable during the process. Some of these issues may have arisen during the data collection for this work. During one interview in particular, with another NHS research manager, it was found on reading the transcript that there were long technical discussions about how to manage research funding streams – here the researcher may have been seen as Coar and Sim's 'authoritative source'. Many of the interviews started by the respondent describing how well their Research Support Office functioned and how little they cost to run – this may have been respondents displaying either vulnerability or demonstrating their professional competence in deciding the appropriate structures to have in place. Some, but not all respondents gave evidence as to their personal credibility for the positions they held. Nevertheless, the conflict between being a peer and being a researcher is lessened by considering the benefits of using a common language and understanding the same challenges. However, the researcher was careful not to assume that those common understandings did in fact exist and sought to confirm understandings where possible. Early transcripts were shared with the academic supervisor and discussions took place on how to maintain the role of the researcher whilst acknowledging the role of the peer.

The role of the researcher is to elicit new understanding in as rigorous a way as possible within their given field. Research is primarily an exercise in knowledge

construction. This is not a passive process but requires scrutiny, reflection and active interrogation of the data. Researchers do not work within a vacuum and it is inevitable that past experiences, knowledge and attitudes to particular situations will be reflected both in the subjects chosen to be studied and the methods and questions chosen to study them (Guillemin & Gillam 2004, Willig 2001). In this study, the researcher wanted to understand the relationships between HEI and NHS Research Support Offices, why decisions to form joint offices had been made and what the drivers were for those decisions. As the first step in this work was to work out what models existed for Research Support Offices, this led to the use of a survey to map this work and then to interviews to try to understand in more depth what the drivers and relationships were. In this way, the assumptions made by the researcher about which areas were most important to study in which order led to the design and chosen method and methodologies.

6.5.2 Limitations

The survey was a very simple survey with only 12 questions. The small sample size has also limited the options for data analysis. As evidenced by the responses to questions on function and governance, the inability to clarify responses with respondents has also limited interpretation of the results.

The reflections above about the role of the researcher when conducting research with peers is both a strength of this work and a limitation. The strength was clearly shown with the 100% response rate to the survey – the survey was of relevance to the recipients and simple to complete. However, it should be recognised that this response rate could also reflect the personal relationships held by the researchers. These personal relationships were clearly of benefit with regard to the return of the survey and with some of the interviews, where existing relationships allowed for discussions to reach a level of depth that may not have occurred without them. However, it should equally be acknowledged that these relationships – or possibly even the relationships the researchers may have been thought to have with others, may have resulted in some of the participants being less than forthcoming, as was seen with one of the interviews where the participant declined to answer several questions.

Another limitation of this work was the need to maintain absolute confidentiality. This was offered at the beginning of the interview sessions and was reiterated when the transcripts were shared. Two participants then asked that the anonymising of the data be extended to not naming the city in which the participants and their institutions were based. This was of course respected. However, this had led to limits on how the findings could be reported. For example, there is a concentration of clinical and applied health research in London and some of the participants were from London based institutions. Others were from provincial universities and NHS Trusts. The assurance of confidentiality has meant that it has not been possible to report any differences between institutions as explanation of those differences could have led to the reader being able to identify individual institutions. The interview analysis was conducted largely by the main researcher alone and therefore reflects only one view on interpretation. This could lead to limited validity for this work. The emerging themes were checked and discussed with the supervisors and reasonably long quotations from the interview respondents have been included to attempt to mitigate this limitation.

The final limitation of this work is that the data were collected between 2008 and 2010. Therefore the analysis and findings can only demonstrate what was known at the time of the survey and interviews. Structures and partnerships may well have altered considerably since this time – especially since the AHSC's in England will be maturing and this will impact on partnership working.

6.5.3 Future research

The first suggestion is to add to this work by evaluating the efficacy of the different models of partnership. Although evaluation of partnerships is fraught with methodological complexity (Glendinning 2002), it will be important to know that the effort that goes into building Research Support Offices that cross institutional barriers are worth the effort – that is, do they increase grant income, or reduce the time taken by researchers to gain complex regulatory approvals, or do they deliver research to time and target – and are these the measures that should or could be used to measure the efficacy of research support? A second suggestion for future research would be to concentrate on one of the end users – the researcher - and question how

does the structure of Research Support Offices impact on the researchers? Do they receive a better service? Is there time released to concentrate on the less administrative side of their research? Who is the end user of Research Support Offices – are these functions there purely to support the organisational and political needs or are they there to support the researcher?

A third suggestion for future work would be to look outside England at other models of partnership working between health care providers and higher education institutions. One place to start this would be to examine the existing literature on Academic Health Science Centres from the United States and parts of Europe. At the time of the data collection for this work, the AHSC's in England were in their infancy. The AHSC's in North America and Europe are well established. A comparative study of English AHSC's and other AHSC's with reference to their success for building clinical and applied health research would be of value.

6.6 Summary and conclusion

In summary, the research strategy *Best Research for Best Health* combined with an increasing political and economic focus on reinforcing the UK base for translational clinical research, led to the need to re-examine the way research was managed and administered in England. In a complex regulatory environment with a fragmented approach to research support it was timely to review how the University and NHS research management and administration communities might best work together to support translational and applied clinical research. There is a gap in the literature around the structure and models of partnership Research Support Offices. The questions asked in this research – mapping current research support arrangements and exploring these arrangements in more depth have started to fill some of the gap in established literature about partnership Research Support Offices.

Reasons for the NHS and University partners to work together can be summarised as follows: firstly, it allows for the use of scarce resources – skilled research managers, particularly at a senior level, are rare and difficult to recruit (Langley & Green 2009). The complex regulatory environment can be tackled for researchers with expertise from all stakeholders in the research management and administration community –

in this way, as the Audit Commission (1998) describe, difficult policy and operational problems that would be impossible for one partner alone to tackle can be taken on. Working together also satisfies the need to provide a one-stop-shop (Audit Commission 1998) and working together allows for the sharing of best practice (Glendinning 2002).

The drivers for partnership working between the University and NHS are increasing (AMS review 2011). The importance of the biomedical research industry to the UK economy is immense. The national strategy around applied research continues to garner support from the most senior levels of government (Nesta 2011, BIS 2011). The Plan for Growth, published in March 2011, will now link payment to performance for NHS Trusts in receipt of NIHR money with some very stretching targets around delivery of clinical research. The NHS will need to engage early with potential researchers and influence project protocols to ensure delivery is feasible. Working in close collaboration with University research management and administration colleagues will be essential. Those that achieve cohesion will be best placed to take advantage of the funding streams in an increasingly competitive environment. Those seeking to work in partnership, or those already working in partnership and wishing to improve their services, should focus on creating a clear shared vision and establish from the beginning clear aims for the partnership and acknowledge tensions and different priorities in advance.

The implications for research management of this work are as follows: Joint working needs to be seen in the context of the outputs, rather than structure. The needs of researchers and research management are intimately connected and organisations need to be agile enough to be able to support research and researchers across organisational boundaries.

The fragmentation in support and the lack of common systems and processes damages research endeavours in the UK. The focus on structure has distracted the research management community. A better focus would be on providing seamless support for researchers in terms of support to navigate the regulatory environment. There is no doubt that where partners can form a single office for their researchers that this has led to better understanding between the organisations. What is less

clear is whether this has resulted in any tangible benefits for the organisations, the researchers or the research management community. The joint offices have not solved the issues of having different financial systems or different legal organisations. The regulatory environment is no simpler for researchers working in organisations that have joint offices. A focus on the benefits for researchers and research may well produce joint ventures with clearer visions and a greater chance of success.

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Models of Research Support

1. Survey of Models of Research Support for Applied Health Researchers

Thank you for agreeing to take part in this survey. Your time and effort is much appreciated. Please try to complete all the questions. If you have any questions about this survey, please do not hesitate to contact me.

Best wishes

Mary Perkins - 0117 342 0226/07920 591574

David Langley

Linda Bauld

2. Default Section

1. Please provide your contact details:

Name	<input type="text"/>
Job title	<input type="text"/>
Name of Unit/Department	<input type="text"/>
Name of University	<input type="text"/>
Address 1	<input type="text"/>
Address 2	<input type="text"/>
Address 3	<input type="text"/>
Address 4	<input type="text"/>
Postcode	<input type="text"/>
Telephone	<input type="text"/>
email	<input type="text"/>

2. Does your department provide administrative support for Clinical Research? (ie research with humans, their tissue or data)

☐ Yes

☐ No (If no, please do not continue with this survey - thank you for your time.)

3. What types of clinical research does your department support?

- ☐ Phase 1 Clinical Trials on Investigational Medicinal Products (CTIMPs)- (drug trials)
- ☐ Phase 2-3 Clinical Trials on Investigational Medicinal Products (CTIMPs)- (drug trials)
- ☐ Phase 4 Clinical Trials on Investigational Medicinal Products (CTIMPs)- (drug trials)
- ☐ therapeutic interventions - non IMP trials (for example surgical or psychiatric interventions)
- ☐ observational research
- ☐ epidemiological research

Other (please specify)

Models of Research Support

4. Is the Research Support you provide:

☐ within a centralised department

☐ devolved out to departments/schools/faculties

Other (please specify)

5. Please indicate, if any, how many of the functions below are the responsibility of your department, or are devolved out to operational teams. (please note, this is not an exhaustive list, for example, enterprise and innovation are not covered in this list)

	Your Department	Devolved
Research strategy	€	€
Horizon scanning for funding opportunities	€	€
benchmarking	€	€
bid and proposal development - scientific case	€	€
bid and proposal development - financial costing	€	€
identifying NHS support costs for clinical research	€	€
identifying NHS treatment costs for clinical research	€	€
ethics approvals - applying for	€	€
ethics approval - ensuring this is in place	€	€
regulatory approvals - applying for	€	€
regulatory approvals - ensuring they are in place	€	€
NHS Trust (R&D) approvals - applying for	€	€
NHS Trust (R&D) approvals - ensuring they are in place	€	€
invoicing	€	€
post-award management - expenditure control	€	€
post-award management - audit/monitoring of projects	€	€
audit	€	€
regulatory inspections (e.g. medicines and healthcare regulatory authority (MHRA))	€	€
networking with funders	€	€
portfolio management	€	€
governance	€	€

Models of Research Support

6. With which NHS Trusts is your University associated locally? (Please list)

5

6

7. Of those NHS Trusts which (if any) would you consider to be the main associated Trust?

8. Sponsorship Duties: With regard to clinical research, which organisation is responsible for the following sponsor duties:

	University	Trust	Research Team	Other
independent expert review of protocol	€	€	€	€
managing finances	€	€	€	€
agreeing contracts	€	€	€	€
Regulatory approvals (including ethics)	€	€	€	€
insurance	€	€	€	€
pharmacovigilance (including adverse event reporting)	€	€	€	€
monitoring progress	€	€	€	€
monitoring compliance	€	€	€	€
training research team	€	€	€	€
resource availability	€	€	€	€
dissemination	€	€	€	€

Other (please specify)

9. Thinking about your departments relationship with your main NHS Trust, there is a:

- € single office (ie one identity, one head of department shared premises, shared staff)
- € joint office (shared staff, shared location)
- € joined office (we work closely together,have a contract or SLA in place to agree responsibilities and roles but we are separate entities with separate leadership)
- € joined office (we work closely together as above but do not have an SLA or contract in place)
- € joined (we work closely together, have some shared processes and share some information)
- € separate (but we communicate well on issues of importance)
- € separate (we communicate when we have to, but apart from that we leave each other alone)
- € Separate (we have little or no communication with associated Trust R&D offices)
- € None of the above describes our relationship (please see next question)

Models of Research Support

10. If none of the above models described your relationship with your main associated Trust(s), please would you describe that relationship here. Please describe funding mechanisms, processes and interactions.

	5
	6

11. How effective do you think your existing structures are to deal with the current clinical research agenda?

☐ Very effective

☐ effective

☐ somewhat effective

☐ ineffective

12. Are you considering re-structuring your research support office? If so, what changes are you planning to make? Please describe in terms of timescale and drivers for change

	5
	6

Appendix 3.2

Topic Guide for Interviews

1. Current Structures – key players – probe definitions – e.g. ‘joint’
 - a. Process – how were relationships/partnerships agreed and developed
 - b. Outputs – e.g. joint structures and processes (employment)
 - c. Outcomes – e.g. increased access/efficiency gains
2. Relationship with NHS/HEI
 - a. key players
 - b. agendas / unique points
 - c. key priorities
3. Barriers to research and supporting research –
 - a. views from above
 - b. views from below
4. Measures of Success
 - a. From research support point of view
 - b. From research pov
 - c. From institutional points of view
5. Vision for the Future
6. Other Issues?

Appendix 3.3

Extract from Transcript to show use of Review function and comment boxes to distil data into framework

I Right, okay, well that's useful to know so...

R We are predominantly biomedical.

Comment [M1]: Predominantly biomedical research

I And is that because of the links you have with NHS TRUST?

R Ah...

I Or do you have those links?

R I'm not sure we have... well, I think the answer is yes and no.

Comment [M2]: Relationship with major NHS trust – in response to question about strong links with the trust, the answer was *Ah...I'm not sure we have...well I think the answer is yes and no.* (2)

I Yeah.

R I don't think it's because of our links with NHS TRUST. I think both us and NHS TRUST have been the subject of pressure for us. And that's interesting just going backwards for five years...

I Yeah.

R ...and some of the old kind of...

Comment [M3]: London pressure for this HEI and Trust. Context – many planned mergers and service reconfigurations for several years. (3)

I It's been a fascinating insight into how things are here.

R There's been kind of a lot of rationalisation because, when I came it was HEI and the HEI Medical School was XXXX and that was quite small. But since then we've merged with a.n.other Hospital Medical School, the a.n.other Medical School, the ...Postgraduate Institute, the (other institutes) and those have been paralleled I think by rationalisation on the Hospital side...

Comment [M4]: Mergers and changes on both HEI and NHS side (3)

I Yeah.

R ...not entirely but, you know, ((part of?)) XX Trust is still separate but the XX Hospital is now part of TRUST.

Comment [M5]: Lots of mergers on the HEI and the NHS side (3)

I Right.

R So the growth has been driven by merger by and large I think.

Comment [M6]: Growth in biomedical research driven by the HEI and NHS mergers (3)

I Certainly, yeah, it's really interesting, by the Trusts combining...

R And, yes, yes.

I ...getting bigger. And you took over other medical schools, becoming much bigger.

R Yes, but I think clearly independently, it wasn't because the Trust...

I It wasn't done together.

R No, no, it was... I think it was the same forces I would say...

Comment [M7]: External pressures on both HEI and Trusts to merge and rationalise. Does not think these merger decisions taken together but independently (4)

APPENDIX 3.4

EDITED SAMPLE OF A FRAMEWORK.

This shows one case and the first four sub-themes of the main theme Structure

CHART 1. STRUCTURE				
Study i.d.	1.1 Description	1.2 Staff composition	1.3 Leadership	1.4 Roles and Responsibilities
D03	<p>50 staff to cover the entire HEI. Primarily deliver biomedical research (2).</p> <p>Size of partnership is important – easier to unpick knock for knock if working with one trust only (4)</p> <p>HEI supports the funding bids, joint unit to manage clinical governance – ethics, sponsorship, clinical trials (8)</p> <p>Joint unit is within the medical school management structure</p> <p>committee structure to agree which clinical trials the joint unit will support. Strategic committee to agree priorities (and to say no if necessary) and operational committee to oversee the work (14)</p> <p>have set up a partnership type arrangement (AHSC) with other institutions which is supposed to make us act as one but I have to say...you know it's early days for that and I think lots of different people have lots of different ideas of what it actually is(11)</p> <p>developing a European powerhouse of biomedical research but it is at strategic and not operational level yet (12)</p> <p>Medical school has own faculty research and houses the joint clinical trials unit. The other faculties have a singly research facilitator each, all other research support sits within the central office. (17)</p>	<p>NHS representation on the strategic committee is through the clinical academics only <i>so it's got representation but will normally be people with two hats (15)</i></p> <p><i>Dean of Medical School also Director of research for the Trust (17)</i></p>	<p>The CEO of the Trust is key in not driving forward a partnership with the HEI. <i>current Chief Executive pays lip service to partnership but actually it's not interested. It's possibly just isn't high enough up their list of priorities, you know. It's possibly nothing deliberate; it's just, "We've got this problem, we've got that problem, we've got that problem," and trying to manage them.(22)</i></p>	<p>accounting and financial responsibility for grants with the HEI. Research support for grant applications with HEI.</p> <p>Governance sits with joint unit (8/9)</p> <p>role of the joint office has changed from one of gatekeeper to support for all elements of research</p> <p>there is more strategic decision making around the use of resources and prioritising important areas of work (14)</p> <p>strategic committee has powerful role in steering research direction as word soon gets around about which projects have been turned down (15)</p>